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JOHN H. ROBINSON, EDITOR AND MANAGER

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AN INTERESTING LETTER FROM JAPAN

WHEN the foreign breeds of poultry were imported into this country for the first time, the arts of incubating and brooding were also introduced and practiced after the manner exactly similar to the foreign system. While we were trying that method we began to modify it into such a contrivance as best suited our climate, conditions, and manner of living, etc. At last some of our poultry raisers devised a peculiar method which is entirely different from that of foreign countries.

I am now intending to describe this method briefly for curiosity's sake. This new method is quite practicable and is pretty well adopted in Japan with good success. We use the oil or gas as a heat generator for hatching purposes, as in other countries; but in this new method of brooding, charcoal is substituted, owing to economy and simplicity of construction and usage of the instrument. The charcoal for this use is made of its powder mixed with some adhesive matters and water, moulded or patted into a round shape like a ball nearly two inches in diameter, and dried by sun heat. This kind of charcoal ball is generally used by our low class people during the cold season at night to keep their feet and body warm, especially for weak and old people. This ball fire keeps quite a long time; it lasts nearly a whole long winter night when the ball is deeply buried in wood ash and carefully covered with it. This material was utilized by chick growers for brooding purpose successfully, and is now prevailing among many professionals as well as amateurs.

Now for the operation of the new method. There are two boxes of the same size needed, and the one is piled upon the other. In the upper box newly hatched chicks are kept and fed, while in the lower one a metallic box is placed in which ignited charcoal balls are deeply buried in ash. By this way chicks grow well by gentle warmth from below, and its floor is always kept dry. But in adopting this method we must take proper care to avoid the tendency to weak legs or debility caused by too much heating. To get rid of these defects I have devised to apply the heat from above, using also the charcoal fire, but in different forms.

There is a singular, yet useful, instrument in Japan also used by weak or aged persons during the winter either to protect from cold or to soothe pain of some parts of the body. This instrument is very often used even in rich families. It consists of a metallic box or case nearly eight inches long, three inches wide, and two inches high. Inside of it there is a piece of metal fixed to prevent the burning of a thing that comes in contact with it. The outside of the instrument is per-

forated with many holes and the surface is covered with velvet or flannel to mitigate the irritating heat. On one end of this case, there is an opening provided a lid to close with, through which the ignited rod like a paper sack packed with very fine charcoal powder can be inserted, and the lid is put on. Then it is to be wrapped up or covered with a thick cloth so as not to loose the heat easily. It emits genial heat through the holes for a day or night. I adopted this magic instrument to be placed upon the box where chicks are kept, and put a

2d. As vegetable food we use plenty of green leaves of rape kind of plants resembling partly to cabbage and partly to lettuce, which are widely cultivated throughout our country for table use. These greens are very finely chopped and well mixed with grain meals and carefully hashed and boiled fish refuse. All these substances are thoroughly mixed so that the whole mass looks like greenish lumps, especially when chicks are fed in a dry way absolutely excluding water. Some experienced experts believe that thorough mixing is necessary for inducing appetite.

3d. Animal matters are also thought to be essential ingredients for their stout growth; but it is very seldom we give milk, as it is comparatively dear in this country. When fluid animal substance is required, we substitute fish soup prepared from fish refuse.

For dry animal substances we prefer small fishes or shrimps to other animal refuse of beast or fowl, as the former are thought to be more digestible for the delicate organs of young chicks in one respect, and cheaper and more easily obtained in the other.

Among all kinds of animal matters, the most popular and valued substance as excellently high nutritive food for chicks is eel's head, which is exceedingly rich in gelatinous as well as oily matters. In Japan, eel's head can readily be gotten almost everywhere; because the people relish it as a very palatable dainty, when cooked in very skilful ways. Our chick growers believe that the eel's head is an indispensable substance for quick and vigorous growth of young chicks, and they unanimously perceive its unrivalled efficacy for the vital energy.

As to the box where chicks are kept, we use mostly old empty boxes in which oil cans were contained. One box of this kind can accommodate twenty-five or thirty chicks just hatched; and then their number is gradually diminished week after week. This box is placed sideways, and in front of it a glass plate is inserted, and on the upper part of it there is furnished a vent or a small window through which foul air is let out. According to my devise only one box is required, and the construction of it is entirely different. The size of the box is twice as large as the former, and a

partition is made on one third of the length of the box. In the smaller room, chicks are kept at night, and in the larger one chicks eat and run about during the day time. Upon the smaller room of the box the heating apparatus of my devise is placed, while on the remaining part of it a thin porous Japanese paper is spread out like a ceiling over a wire netting. Upon the floor of the box should be somekind of matting to keep it clean. For this purpose, some thick and coarse cloth is used, which is to be changed every morning and evening with a dry clean one.

Instead of thread woven stuffs I substituted a

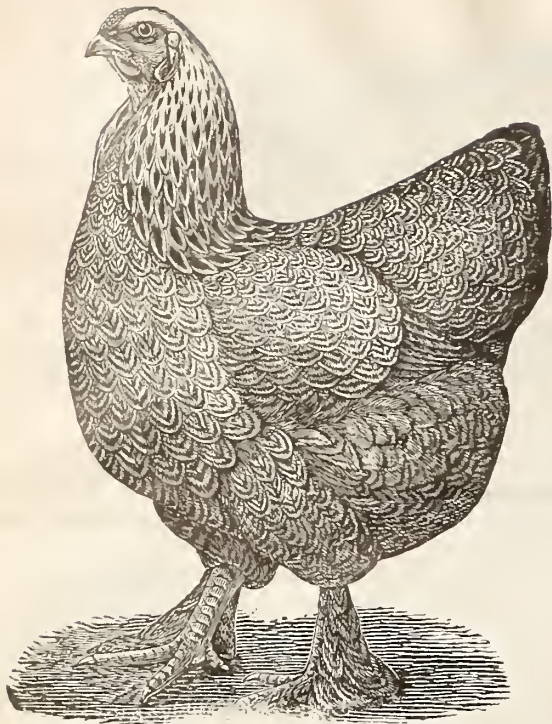


Long Tailed Japanese Fowl
Reproduced from a Japanese Illustration

thick cloth folded into several layers to prevent the escape of the heat. There is a smaller size of this instrument which can be carried in a pocket or any part of the body under the dress, either to warm or to allay the pain.

Concerning our way of feeding chicks I will try to pick out those points which are different from yours.

1st. The grain food we use mostly are millet, rice, barley, wheat, etc. They are given ground or crushed, either soaked in a simple water or boiled with fish scrap soup; but we very rarely give corn meal.



Old Style Dark Brahma Hen
Cut from C. A. Ballou, Worcester, Mass.

bamboo woven matting, especially made for this purpose; and it is much easier to keep the floor clean by washing with the brush of the same material. It dries quicker than any kind of cloth, and never gets worn or torn off by scratching with chicks' feet. It is quite stiff and elastic. It can neither be wrinkled nor turned up when chicks are running, scampering, or scratching upon it. Moreover, it is durable and economical. I wish to describe more particularly about them as well as other matters; but I am afraid to occupy too much room of this valuable magazine with an unworthy note like this. If any of the readers want to know further, I will be much pleased to answer accordingly.

Besides, in Japan there are numerous interesting and curious things both in plants and animals; for instance, there are some breeds of poultry in which cocks have enormously long tails growing over ten feet, or cocks crowing with long, melodious tune of voice, or a breed which has peculiar petty dwarf body, yet has graceful and pretty shape. In plants, there are various kinds of trees stunted in growth and dwindled in shape, yet they thrive in pots over ten or even over a hundred years, assuming the appearance of gigantic and elegant old trees in forests. They are kept almost in every well-to-do family for ornaments and pleasure.

Not only these, but there also exists several varieties of birds, fishes, even insects of various colors, shapes, manners, voices, etc., for which manifold ways of feeding and keeping are hinted respectively. There are also many other interesting things about the products of arts and industrial fabrics of exquisite finish.

As our country has stood so many long years without ever being conquered by other nations, these peculiar tastes were fostered and developed into an unrestricted degree added to by recent devices.

It would be a delightful task for the civilized people, I believe, to investigate any curious, yet obscure, facts of the far East, and it would also be a quite pleasant service for us to correspond about these in exchange with the scientific knowledge of the West, in order to promote mutual interests and benefits.

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THE VALUE OF GRIT IN POULTRY FEEDING

Introduction

GRIT in the bird's gizzard, according to a long accepted theory, performs a function similar to that of teeth in mammalia. Dr. T. P. Shaw, (McGill University), who has recently made some close observations on the physiology of digestion in the domestic fowl, states: "The function of the gizzard is to crush the hard grains. This it accomplishes by muscular contractions which rub the grains one against the other. This process is very much facilitated if sharp particles of grit are mixed with the grain. Some writers claim that grit is unnecessary for poultry. We fail to notice the report of any experiments which prove that fowls without grit in the gizzard, when fed on whole grain, did as well as fowls with free access to grit. Some experiments have been reported where the observers have taken for granted that the gizzard did not contain grit because the birds had not access to any for a month. The author has counted between fifteen and twenty-five particles of grit, varying in size from that of a pin-head to that of a split pea, after birds have been without grit for three months. In young chicks the soft food given may become impacted in the gizzard. This is prevented by allowing chicks access to sharp sand. The sharp sand particles stimulate the muscular action of the gizzard which is sluggish when soft food is given."

Passing from the finding of a scientist to those of a practical poultryman, we read the following in "Principles and Practices of Poultry Culture," by John H. Robinson: "Reasoning from analogies observed between birds and ruminants, and from the fact that small particles of stone, glass, earthenware, etc., were often found in the gizzards of fowls in course of preparation for the table, it was long ago assumed that the gizzard itself was inadequate for its function, and that the bird swallowed these substances because they were required for the mastication of its food. * * * I followed the common practice (of feeding grit) long after I was convinced in my own mind that the birds had no need of grit to grind their food, but finally abandoned it, and since about 1902 have given no grit to chickens." John H. Robinson, however, rears his chickens largely on free range, so that there is all likelihood of their obtaining an abundance of grit without it being given as a particular feed. The same poultryman further reports: "A pen of twenty-five extra large hens in my yards, supplied with indigestible grit and oyster shell, consumed in eight months less than a pint of grit." Presuming the hens in question to have had an average amount of grit in the gizzard at the commencement of the experiment, the weight of this argument against the feeding of grit to chickens is counterbalanced by the findings of Dr. Shaw regarding the length of time grit is retained in the gizzard.

Some experiment stations, as well as individual investigators, have taken up work along this line. In a Bulletin entitled, "Experiments With Poultry," compiled from the twenty-sixth annual report of the New York Agricultural Experiment Station, the results obtained from experiments made with nineteen lots of chickens, ranging from one to three weeks of age, showed that "the mixing of sand in the food, both in a ration containing food and in one without, resulted in better health for the chickens, and more efficient use of the food."

The U. S. Department of Agriculture published, in 1904, a Bulletin entitled, "Digestion Experiments With Poultry." In a section with the heading, "The Utilization of Sand by Poultry," we find the following:

"The consumption of sand is much greater on an oat than a corn diet. This is no doubt occasioned by the greater proportion of fibre in the oats." Experiments with individual chickens were also recorded. Grit was withheld from two chickens for a period of six months. Up to five months the lack of gravel "had apparently not led to any serious impairment of digestion, but after this the animals appeared gradually to become debilitated." In another individual, grit was found to be retained in the gizzard "after a lapse of seven months."

It is evident from the foregoing, that work in connection with the feeding of grit to poultry cannot be out of place, the lack of authenticity in the work heretofore undertaken being largely due to the factor of the presence of an undeterminable amount of grit in the gizzards of the birds at the time the experiments were commenced.

The work undertaken in this investigation was of such a nature as to attempt to determine, definitely, the actual value of grit in poultry feeding.

Synopsis

Day old chicks were used in all tests in this experiment, thus obviating any danger of there being any grit in the gizzard at the commencement of the tests. The chicks were carried through until maturity was reached, unless death intervened, or, for other reasons, the test was discontinued. Each test comprised two lots of chicks, identical as regards breeding, method of incubation, and age. One lot in each test was supplied with grit *ad libitum*; the other received none; otherwise, except where specifically stated to the contrary, each lot was fed identically. Each lot of chicks in each test was weighed daily for the first two weeks, after which weekly weighings were substituted. Accurate weights of all food fed were recorded. Observation notes, regarding the condition of the chicks in general were taken from time to time, as occasion demanded. All cases of mortality were subjected to post mortem examinations to determine the cause of death, if possible, and the condition of the digestive system.

In all, five tests were completed in determining the value of the feeding grit to chicks and one test on the value of feeding grit for egg production; the birds in the latter test were taken from the lots in the chick tests, the grit-fed pen being made up of chicks which had been supplied with grit from the start, and the gritless-fed pen being made up of chicks from which grit had been withheld from the start.

Feeding and Management

In each of the tests grit was fed to one lot and withheld from the other lot. The grit was fed in hoppers, and small quantities were added to the moistened mash feedings from time to time.

The method of feeding the mashes and grains was that employed in general practice. The two lots in the first three tests were given a mixture of hard boiled egg (without the shell) and bread crumbs in the proportion of 1.2 for the first four days. Oatmeal was given twice daily until the chicks were one month old. The following mash mixture was fed dry in hoppers and moistened twice daily:

- 2 parts by weight oatmeal feed.
- 1 part by weight bran.
- 1 part by weight cornmeal.
- 1 part by weight middlings.
- 0-20% fish scraps.

Finely cracked wheat was fed after the chicks were a few days old. Finely cut alfalfa hay was fed twice daily, and fresh water was kept constantly before the chicks.

The lot of chicks in tests Nos. 4 and 5 were fed grain only, consisting of cracked corn and whole wheat from which the finer particles had been sifted to prevent the chicks from receiving any soft food whatever.

Wood shavings formed the litter for all of the chick tests. The chicks were confined indoors throughout the entire test, being kept in the brooder house which has a cement floor.

Test No. 6 extended from October 12, 1914 to February 1, 1915.

The two pens were each four feet wide by twelve long, and cement floored. Straw was used for litter.

The method of feeding was practically the same as had been employed in the latter part of the tests from which they had come. Dry mash (same composition as in Test 1.15% fish scrap) was kept before the birds in hoppers at all times, and fed moistened twice daily. Grain, consisting of equal parts of wheat and cracked corn, with a few oats, was fed morning and evening. Green food was given once daily. Water, which was given in shallow pans raised off the floor, was changed twice daily. Air slaked lime was fed to both lots in



Poultry Plant at New Jersey Experiment Station

hoppers. The grit fed to Lot A was large size mica crystal grit. The birds were weighed at the beginning and end of the test.

Summary of Results

Tests No. 1 and 2 gave no positive results from the fact that the chicks which did not receive grit did almost as well as those which received grit. There were no material differences in the grains in weight for the different lots, and there was no material difference in mortality. Chicks not supplied with grit seem to be able to digest finely ground grains without any apparent injury to digestion and general health.

Test No. 1 showed that where plenty of soft food as well as grain is fed, grit is by no means an indispensable requirement. From the standpoint of economy of food, however, there appears to be a trifle in favor of grit feeding as may also be surmised from Test No. 6. The two lots in Test No. 2 gave, similarly with Test No. 1, practically parallel results from start to finish.

The tests which gave distinctly positive results, viz., Tests Nos. 3, 4, 5 verified the findings of Dr. P. T. Shaw in regard to the digestion of hard grain, i. e., that it is much facilitated if sharp particles of grit are mixed with the grain. In all three tests, this was shown definitely, both in the general condition of the chicks and in the grains made per unit of food consumed. Only one case of impaction of soft food in the gizzard, however, was observed. This was recorded in the post mortem of chick No. 4, Lot B, Test IV.

No definite conclusions can be drawn from Test No. 6, although the observations from this single test are interesting. In this test Lot A received grit, while Lot B did not receive grit.

The various tables show the following:

1. Lot B consumed $23\frac{1}{2}$ lbs. more feed than Lot A.
2. Lot B consumed $54\frac{1}{2}$ lbs. more mash than Lot A.
3. Lot A consumed 31 lbs. more grain than Lot B.
4. Lot A gained in weight a total of 99 ozs. more than Lot B.
5. Lot B laid nearly twice as many eggs as Lot A.

It is seen from the foregoing, that the chicks which received no grit consumed considerably more mash — to be exact, one-fifth more — than did those to which grit was fed. This, from previous tests, was to be expected. The greater total amount of feed consumed by the chicks in Lot B can probably be accounted for by the greater number of eggs laid by them. This, however, is offset to a greater or less extent by the superior proportionate gains in weight made by the chicks in Lot A.

That the absence of grit has, at any rate, no diminishing effect on egg production is very evident from item No. 5. It must be noted in this connection, however, that at about the time occasional soft shelled eggs were laid in Lot B, the pullets responsible for the eggs became so weak twenty-four hours prior to laying that they could not even stand up. After laying, this weakness would gradually wear off during the succeeding days, until the pullets were just about ready to lay again, when the same weakness would again strike them. This condition continued with the pullets in Lot B to the end of the test. Further tests, however, would be necessary to determine definitely to what extent this weakness was due to the absence of grit.

All of the eggs laid by both lots were small in size. The majority of those laid by Lot B were thin shelled, while a few were soft shelled.

The exceedingly low egg production, as regards both lots, is to be attributed to the close confinement to which the birds had been subjected through their lives.

During the carrying out of these tests, question was raised as to the relation of grit to the absorption of the yolk sac. Careful perusal of the post mortems in all the tests show that no definite indications were offered in support of any relation whatsoever.

Final deductions, therefore, point to the practical necessity of grit for the economical digestion of whole grain. They tend also to bear out the contention of the findings of the New York Agricultural Experiment Station in regard to the more efficient use of the food when grit is fed. The advisability, or otherwise, of the practical poultryman going to the expense of providing commercial grit for the consumption of the fowls, resolved itself into a question of conditions. If the chicks are reared and kept largely under free range conditions on sandy soil, the value of any special provision of grit would be of a highly questionable nature. Where the chickens are subjected to considerable confinement, as on average intensive plants, the results of this work indicate that a provision of grit will prove profitable, if not indispensable. — M. A. JULL, in the Journal of the American Association of Instructors and Investigators in Poultry Husbandry.



Buff Cochins

ANOTHER INTERPRETATION OF PROFESSOR JULLS' RESULTS

WHILE disagreeing with Professor Jull's final conclusion, whether considered as deducible from the data he gives or from these and related facts as I know them, I welcome his work as a valuable contribution to the study of this matter. I ought to, for it is the best thing in support of my position in regard to the use of grit that has yet appeared. This is true even though Mr. Jull fails to consider the difference between the functions of mineral matter as food and as teeth, which is of prime importance in getting at the truth in this case. I do not think that I have seen a report of the experiment of Dr. Shaw. If one had come to this office I would not be likely to overlook it. I do not find it among my bulletins relating to poultry. For this reason and because I suppose that a more detailed report of Professor Jull's experiment will appear before long, I shall comment at this time only on the case as here treated.

The outstanding facts in Professor Jull's experiment are: That he raised chickens without grit both on an all ground food ration and on an all hard grain ration, and that in a comparison of egg production between hens fed grit and hens not fed grit it was not apparent that lack of grit affected egg production. These findings carry us a long way from the traditional theory of grit as an essential requirement for digestion.

It appears that the chicks were not in any case particularly good chicks, and that in the laying test results were small. But this is what would occur under the conditions in which birds in such experiments are kept, which conditions are unfavorable to normal digestion and health regardless of the rations. These conditions equally affect all birds in the experiments, yet we may easily err in drawing conclusions from the experiment to apply where conditions are different.

Now why was it that "positive" results — that is, differences in results which seemed to show something

definite along the line of investigation — were obtained in tests Nos. 3, 4, and 5; and not in tests Nos. 1, 2, and 6? Here is where we come to the nub of the matter. In tests Nos. 1, 2, and 6 ash was liberally supplied to all pens through the fish scrap in the mash. The position I take in regard to grit is that when ash is given freely the advantage of feeding grit does not appear. These three tests seem to me to indicate quite plainly that no particular benefit came from supplying grit to birds so well provided with digestible mineral matter. In the other three tests there did appear to be beneficial results where grit was given because the grit fed birds got some mineral matter in this form while the others got none at all.

When this point has been reached the next thing to determine is whether, if so, to what extent the material given the bird on the supposition that it would be used to grind the food was digestible and so became a source of supply of ash. None of the experiments to which Professor Jull refers throw light on this point. It is often uncertain what material is meant when the terms sand, gravel, and grit are used, and there seems to be no agreement of opinion as to the function of supposedly indigestible mineral matter. Dr. Shaw says that the action of the sand is on the gizzard itself — not on the food — and recommends allowing the chicks access to sharp sand. His view is that it is especially necessary when soft food is used. It would appear, however, that he is discussing a case where the soft food was not of proper consistency. In the New York experiments the pronounced results with sand were secured by forced feeding of sand. Those which had sand accessible and were allowed to follow their appetite did not take it in sufficient quantities to show perceptible benefit. In the United States Government bulletin mentioned, the investigators suppose that sand is required in larger quantities for oats than for corn. I have never been able to take this piece of work as a serviceable contribution upon its subject. It is very long on technique but not otherwise impressive.

This grit question is a difficult one to demonstrate either in the laboratory or the poultry yard. Laboratory conditions are almost immediately productive of some degree of digestive disorder. Under the conditions that usually obtain in practice a bird will swallow considerable amounts of sand, gravel, and almost anything else that can adhere to its food or be picked up with it — not by design — but as an incident in voracious and not particular eating. The fact that the gizzard retains grit or other foreign matter for long periods does not necessarily prove that it is functionally retained for use. It is not unreasonable to suppose that such foreign matter does not pass from it as readily as digestible matter and is retained here and not at any other part of the digestive tract, because the gizzard is indifferent to its pretence.

In his remarks about my fowls, Professor Jull assumes that they secure all the grit that they require without my giving them any, and that in the particular instance he cites the hens did not eat grit because they had in their systems all that they needed. I am not going to discuss these invalid assumptions here, but will merely say to any disposed to entertain them that if they will devote a little time, as they have opportunity, to close observation of the eating habits of poultry under various conditions they may not be long disposed to accept views that have as little foundation as the grit theory.



Scene on the Poultry Plant at Tuskegee Institute, Tuskegee, Alabama

PREVALENCE OF WHITE DIARRHEA

Replies of a Few Breeders to the Questions:

How long have you been engaged in poultry keeping?

Have you ever had any trouble with "bacillary white diarrhea?"

Do you KNOW of any cases where "bacillary white diarrhea" caused serious losses, although stock appeared healthy, conditions were right, and management good?

From F. G. Cook, Superintendent Grove Hill Poultry Yards, Breeder of Highest Grade White Plymouth Rocks and S. C. Brown Leghorns, Waltham, Mass. Established 1876.

"We have never had an epidemic of 'white diarrhea,' and am very skeptical as to whether we have had many true cases of real 'bacillary white diarrhea.' In fact, in our estimation the prominence that the Agricultural College is giving this question at the present time is doing a vast amount of harm.

"I have been personally engaged in the poultry business all my life, and have bred Barred Plymouth Rocks continuously for over thirty years, and believe that most of the trouble arising from the so-called 'diarrhea' is due to wrong conditions in the most aggravated form. To my mind, it is clearly possible that all fowls may be more or less affected, but that it is not a source of immediate danger unless the birds are subjected to unsanitary or most unnatural conditions. My ideas on this subject are strengthened by the fact that birds hatched by artificial methods, especially in the Mammoth machines, are apparently more susceptible to the disease than those hatched by natural methods. And with all due respect to the most modern scientific investigations that are being pursued by the different Agricultural Colleges, I trust my own judgment and the judgment of experienced poultrymen in this respect over and above the theoretical investigation of so-called scientific poultrymen whose real knowledge of poultry is limited to the desk and the laboratory."

From Fred Rockwood, Breeder of High Class Buff Wyandottes, South Brookline, N. H.

"I have been raising and hatching chickens since 1898 (with the exception of three years) and have had very little trouble with 'white diarrhea.' I raise from one hundred to three hundred a year, and do my hatching and brooding with hens.

"In 1904, I tried a small incubator and had two brooders and that is the only time that I ever had any trouble with 'white diarrhea.' I lost quite a number of chicks that season, and my breeding stock was in good condition, so I laid the trouble to the brooders, and have not used any since, although I know that they are used successfully by large breeders.

"A friend of mine sent away last spring and bought five hundred White Leghorn chicks. They appeared in good condition when they arrived, but in about a week they began to *stick up* and die, and he lost them all but a few and he sold the few for what he could get. Now I do not know what condition the breeding stock was n, but I do know they were not properly brooded, and of course that is what I thought was the trouble.

"My observation and experience has been that there has been more 'white diarrhea' where artificial brooding has been used."

From F. W. C. Almy, Proprietor Red Feather Farm, Breeder of Rose and Single Comb Rhode Island Reds, Tiverton Four Corners, R. I.

"I am afraid I won't be much help to you as regards the 'white diarrhea.' I have been in the poultry business more or less for twenty-five years, and while I will admit that perhaps I do not know the disease when I see it, I have never had any of what I call 'white diarrhea.' I have lost some chicks due to (in my opinion) colds and other causes, but not what I understand is the 'white diarrhea.'"

From D. Lincoln Orr, Breeder of Columbian Wyandottes and White Faverolles, Orr's Mills, N. Y.

"How long have I been keeping poultry? Really all my life, but I presume, strictly speaking, about thirty years. Before that I had an old box on the farm that I used when a kid.

"About three years ago I thought I had to be fashionable with my poultry, and thought my chicks had 'white diarrhea,' but after careful study and thought I arrived at the conclusion that I was mistaken. I wrote around all over, but could get no satisfaction, so I just forgot it. I find that my real trouble was (or think it was) because I forced the hens (my breeders) to a very large egg yield. I got many eggs. Seemingly when the

Young chicks came they had not the vitality to hang on, and the mortality was heavy that one season. Since then it has been light. I changed neither stock nor feed, but I did not force my breeders during the winter, so that I never had better success than I had this year.

The only cases I know of are in the press. I firmly believe this so-called 'white diarrhea' is more mental than real; more ignorance than anything else, and I believe there is no need of this disease if one will use healthy birds and common sense; the latter of course you know is a rare thing. Much could be written on this subject, but the unnaturalness of chick raising these days is liable to produce any amount of disease so-called."

From J. F. Robinson, Breeder of White and Black Langshans, South Weymouth, Mass.

"I have been in the poultry business eight years. I have never been troubled with 'bacillary white diarrhea.' In fact, I believe I am safe in saying that not



A White Plymouth Rock Hen of Good Type

two chicks in one hundred ever have bowel trouble of any kind.

"I do not know of any case where 'bacillary white diarrhea,' or any other kind of 'diarrhea,' has caused serious losses, although stock appeared healthy, conditions were right, and management good.

"I never had but one customer complain of the 'white diarrhea,' and he was the purchaser of a three year old hen. After having her about two months he complained that she would not lay, so I wrote him to sell her at the market and send me the proceeds and I would replace her. Then he wrote that she had 'bacillary white diarrhea' so badly that he would not sell her to the market, but he was shipping her to me and if I cared to eat her I could. She reached me with bowel trouble all right. Fat, light combed, lazy. Lay! She could hardly waddle. I gave her a dose of salts, put her in a coop by herself, buried one handful of grain each day in the dirt, and inside of two weeks she was active, her comb was red, droppings normal, and she had laid three eggs during the second week.

"My theory is that by mismanagement and lack of care and the exercise of common sense you can give 'bacillary white diarrhea' to any chick or hen."

From Fremort H. Willis, Breeder of Buff Wyandottes, Brockton, Mass.

"1. Twenty-nine years.

"2. No.

"3. No."

From W. F. Hayward, Proprietor Woodland Farm, Breeder of White Plymouth Rocks and S. C. Rhode Island Reds, Westboro, Mass.

"Replying to your letter and inquiry of November 10, I have to reply as follows:

"1st. Fifteen years.

"2d. Yes.

"3d. No.

"I would say that what losses we have suffered from the disease have been confined to young chicks hatched by incubators and placed in artificial brooders. It has never appeared in adult fowls with us. Whenever it has occurred in brooder chicks it has appeared before the end of the second week. A significant feature of the disease is that it may appear in chicks placed in one brooder, while other chicks taken from the same incubator at the same time and placed in other brooders, and chicks hatched at other times during the same season from eggs of the same flock, show no traces of it. Moreover, we hatch and rear many chicks with hens,

and those chicks are never troubled with white diarrhea.

"Whenever white diarrhea has appeared with us it has been confined to one or possibly two broods of chicks during the season, and the cause could be traced to some error in management during the first few days after they were hatched. There has been nothing in my experience during all these years which would for one moment support the theory that it is inherited. On the contrary, all the circumstances in the cases that have come to my notice have shown conclusively that conditions after the chicks leave the shell are responsible for the disease."

From Joseph Mason, Breeder of Light Brahmas, Newton Upper Falls, Mass.

"Replying to your inquiries as to my experience with 'white diarrhea,' I have had none. I have bred poultry for the past forty years, and during the past ten years have bred from 300 to 700 chicks a year. Three years ago—not having very good hatches—I purchased 100 day old chicks from a breeder in an adjoining town, and found them to be a good, healthy, rapid growing lot. Ninety-five of them grew to the killing size, and the pullets to maturity. Chancing to meet the breeder who sold me the chicks he informed me that he had lost hundreds of chicks from 'white diarrhea' hatched from the same stock that mine were the same year. Query: If the germ that produces 'white diarrhea' comes from the egg, how did my 100 chickens escape?"

"My idea is that 'white diarrhea' is caused by weak

(Continued on page 251)

Farm-Poultry

Established September, 1889

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FARM-POULTRY is devoted directly to all poultry interests and incidentally to the other interests of poultry keepers which are appropriate to a poultry journal. It aims to represent and serve in particular that part of the United States north and east of Philadelphia, and in general those interested in poultry everywhere who want a synopsis of poultry affairs from the point of view of an expert of high authority. Its editor, JOHN H. ROBINSON, has been familiar with poultry culture and poultry literature from early childhood, and for a quarter of a century has been engaged exclusively in this line of work. He became a contributor to FARM-POULTRY over twenty years ago, and has edited it for sixteen years. He is the author of "Poultry-Craft," the most popular general work on poultry keeping; "Principles and Practice of Poultry Culture," a text-book for agricultural colleges; "Our Domestic Birds," an elementary text-book for public schools, and several books on special poultry subjects.

Subscriptions in the United States and possessions and Mexico, 25 cents a year; five years, \$1.00. In Canada, 40 cents a year; three years, \$1.00. In other countries, 50 cents a year.

Advertising Rates—Display advertisements: 10 cents per agate line; \$1.40 per inch. No advertisement of less than one inch accepted.

Classified Advertisements—15 cents a line. No advertisement less than two lines. Discount on yearly paid in advance orders.

Topics of the Times

The Standardization Fallacy

HAVING attended a number of meetings at educational institutions in the past where the question of "standardizing" instruction in poultry culture was brought up, the writer naturally suspects that Mr. Grant M. Curtis' present energetic demand that the A. P. A. prepare authoritative instructions for the mating of Standard fowls is the result of impressions received on his recent visit to this section.

Some of our educators have long been possessed by the idea that it is desirable that educators should agree upon and recommend as best one style of house, one method of feeding, etc. Some of them think that the instructors and investigators should make a "Standard" text book; some that it should be made by the American Poultry Association.

There is the same obstacle here that we pointed out in the idea of the A. P. A. issuing "standard" rules for breeding "standard" poultry. Suppose a standard house is adopted and recommended. People will naturally suppose that it is superior to any and all others. But it will not invariably prove so in practice, and that will destroy the authority of the Standard.

Besides there is the universal disposition of men to improve things to be considered. They are never satisfied with what they have, but always striving for something better. It is not possible to demonstrate a best house, or a best anything. But if it were possible to do it that would not lead to the exclusive use of such a thing. Many people would make changes for supposed improvement, and many more simply to have something different.

Such standardization would no doubt be a temporary convenience at this stage of educational poultry work, but it could never be established in practice, either in school or out.

An Unseasonable Movement

A POINT that seems to be quite lost sight of by the zealous advocates of standardizing the two lines of Barred Rocks is that under the present constitution of the American Poultry Association such a revision could not go into effect for over seven years, and therefore there is no assurance that what the breeders of Barred Rocks might now decide upon as to that Standard would suit them when the time came for action. Those advocates of two varieties of the Barred Rock who think that the matter is settled as they desire and that now it is only a question of preparing instructions for the revision committee that will begin work about

1920, and every breeder preparing meantime to have his stock conform to the change, will find more obstacles than they now dream of.

The movement is too far in advance of the time for action to be effective. It is like a political candidacy projected too early in a campaign or too long before the campaign. And, aside from that, the question is one that involves some principal features of the policy of the American Poultry Association in regard to standards, and it is altogether unlikely that the association could be induced to reverse its policies to suit the breeders of one variety.

The Barred Plymouth Rock Situation

NOTE.—Some time ago in commenting on statement in a contemporary that there should be no "forbidden subjects" in the poultry press, the writer referred to an article upon the above subject which he had written just after the last show at Madison Square Garden, and then pigeon holed because of doubt as to the wisdom of printing as written. At the time the article could not be found, but in looking over a lot of held copy to see what it might yield that could be used in this time of scarcity in production of editorial copy, we found it. Reading it after it has become thoroughly cold, we do not think it more candid than it should be, so we publish it here as written, hoping that its statements will inform many and offend no one.

"IT IS AN undertaking of some degree of delicacy to examine into the cause of public disorders. If a man happens not to succeed in such an inquiry he will be thought weak and visionary; if he touches the true grievance, there is a danger that he may come near to persons of weight and consequence, who will rather be exasperated at the discovery of their errors, than thankful for the occasion of correcting them."—BURKE.

What Burke wrote in introducing his "Thoughts as the Present Discontents" of the British people in 1770 might appropriately apply to some of the present discontents of the poultry industry. Public discussion of many matters is limited, if not suppressed, because our poultry journalism has developed too much the habit of considering the interests of the individual rather than the general good. This is especially true in matters in which the achievements of the individual are more or less a business asset. We are not unmindful of the general interests, but reluctant to serve so indefinite a thing when to do so involves giving possible offense to a patron or friend.

So it happens that many things that ought to be discussed soberly in the press are either not mentioned or are discussed so guardedly that what is said does more harm than good. The Barred Rock situation, and particularly Barred Rock situation as it relates to competition at the leading eastern shows, is a case in point. A brief reference to this was made in the report of the Madison Square Garden show in our issue of March 1st. What was said then was said with the purpose of following it up later with some observations upon the situation as it appears to a general student of such matters entirely friendly to every interest concerned.

When the Barred Rock was far and away the most popular breed in America, and the Madison Square Garden show was the only big show that could be classed as a fixture, the Barred Rock exhibit logically became the chief feature of that show, and the honor of winning there was the highest and most lucrative that a Barred Rock breeder could gain. Down to ten or twelve years ago the advertising and selling value of a good winning at a first class show was good for several years business, and as the breeders producing stock of the class that could win here usually found ready sale for all their stock, a man who made a remarkably good winning one year was not usually disposed to go to the trouble and expense of showing, with the chance perhaps of being defeated, until it was necessary to do so to hold trade. Under such circumstances, various conditions not in accordance with popular ideas of a battle royal for honors naturally developed. In Barred Rocks at New York, perhaps more than in anything else, there or elsewhere, one point of shrewdness in playing the game was to guess when the most honor was to be obtained with the least risk.

Then, if a man was not going to show here he would have something to sell to a business competitor, or—he would not sell he might loan birds in consideration of a like favor at some other time; or birds might be sold with some sort of come-back arrangement. Just how much of this was done, and to what extent such transactions were fictitious, only those making them positively know. It was the common opinion that there was a great deal of it, and those who watched the game closely were suspicious of exhibitors who, with similar

lines of birds, never—or very rarely—competed here at the same time. Exhibitors who would not, or could not, make such arrangements, felt that they were at a disadvantage competing against such combinations.

The judging, too, became in time a serious cause of dissatisfaction. For many years, down to about ten years ago, the Barred Rocks at the Garden were judged by the late P. H. Scudder. Toward the end of his service, exhibitors who did not win under him began to express quite freely the opinion that he was too much attracted to types not as advanced as the public and most judges wanted. The exhibitors, as a whole, did not seem satisfied with Mr. Scudder, but apparently were not able to come to such agreement on any other judge that the secretary would replace him.

In the last ten years new causes of friction have developed. To begin with, the winnings at a show now have a full selling value only until the next, and it takes a sensational winning to be worth very much at that. So competition is more vigorous at the shows. Add to this that the Barred Rocks have not been selling as well for some years, and that makes business competition keener, and everyone can see that the Barred Rock class at the Garden is a likely place for generating trouble.

Since Mr. Scudder's time the Barred Rocks at the Garden have been judged by H. P. Schwab, with sometimes in recent years another judge taking a part of the class. A considerable section of those who exhibit, or want to exhibit Barred Rocks at the Garden, did not want Mr. Schwab in the first place and has not modified its attitude toward him. The most outspoken opposition to him has been on the ground of his intimacy with some of the exhibitors, and supposed familiarity with and bias toward their birds, which many consider creates a condition unfavorable to impartial work, no matter how good the intention of the judge may be.

Regardless of what other objections might be made, and whether they were well founded or not, I think most people will agree that where there was so much feeling a change of judges was desirable. Even if the change brought no better conditions it would begin to clear the air, and the usefulness of a judge to a show depends upon his not becoming a source of disaffection among exhibitors. Yet while we may agree that policy demanded a change of judges we can also see practical difficulties in the way of making a change. With reasonable objection to Mr. Schwab by some exhibitors on outspoken grounds, there was also some criticism that was not so fair, and any secretary would be slow to make a change when to do so would appear to recognize such objection. Further, it is much easier to decide in such cases that a change is advisable than to find a new man satisfactory to both the advocates and opponents of the old one.

We come now to the ambition of E. B. Thompson to be the first of Barred Rock breeders, and to be so recognized, and to a sentence in his advertising that expresses too well the thought of the critics of the judging at the Garden. He says of his Barred Rocks: "They are the standard by which all other Barred Rocks are judged."

"Just so," exclaim his competitors. "That is what we have been saying, and for that reason we will not show at the Garden under Mr. Schwab, whose ideas seem to us to correspond with those of Mr. Thompson rather than with the Standard as it should be interpreted."

That is what brought about the situation at the last Garden show where Mr. Thompson had the field very much to himself. From present indications it will require quite the shrewdest diplomacy in the history of poultry shows in America to enable the Garden to retain its preeminence as a Barred Rock show. Mr. Thompson takes "the stakes" in the game just closed, but coming premier competitions in this variety will be staged where his principal competitors determine, and judged by judges of their choice, and to hold his prestige, he must "go to it" and beat them under conditions of their choosing.

The conditions in this class at the Garden, and conditions resulting from them, have been bad for Barred Rock trade generally. This variety has got more of the undesirable effects of some conditions that are general than others, because of the way interest centered in one show. The disposition of buyers to patronize those who have just made big winnings is something beyond direct control. Perhaps something might be done indirectly to overcome it. Business conditions are better when there is more stability in them, and when the trade in a variety is somewhat distributed.



The Display of Eggs and Mr. Horace Vose's Turkeys at the Boston Show, 1896

"THE CULT" AND THE CULTURED

IN ORDERING a subscription and the insertion of a classified advertisement a poultryman in Massachusetts says: "Sample copy of FARM-POULTRY received, and I note that somehow it is 'different' from the stereotyped poultry journals that I have grown tired of. Your general attitude seems rather trenchant. There doesn't seem to be so much, if any, of what I call 'flapdoodle.' I hardly imagine you to be particularly popular among the 'cult.' Anyhow, I want to read what you have to say for a year. Perhaps you will unloose your facilepen in behalf of the modest egg which is having a hard time of it at the hands of the stevedores of the parcel post."

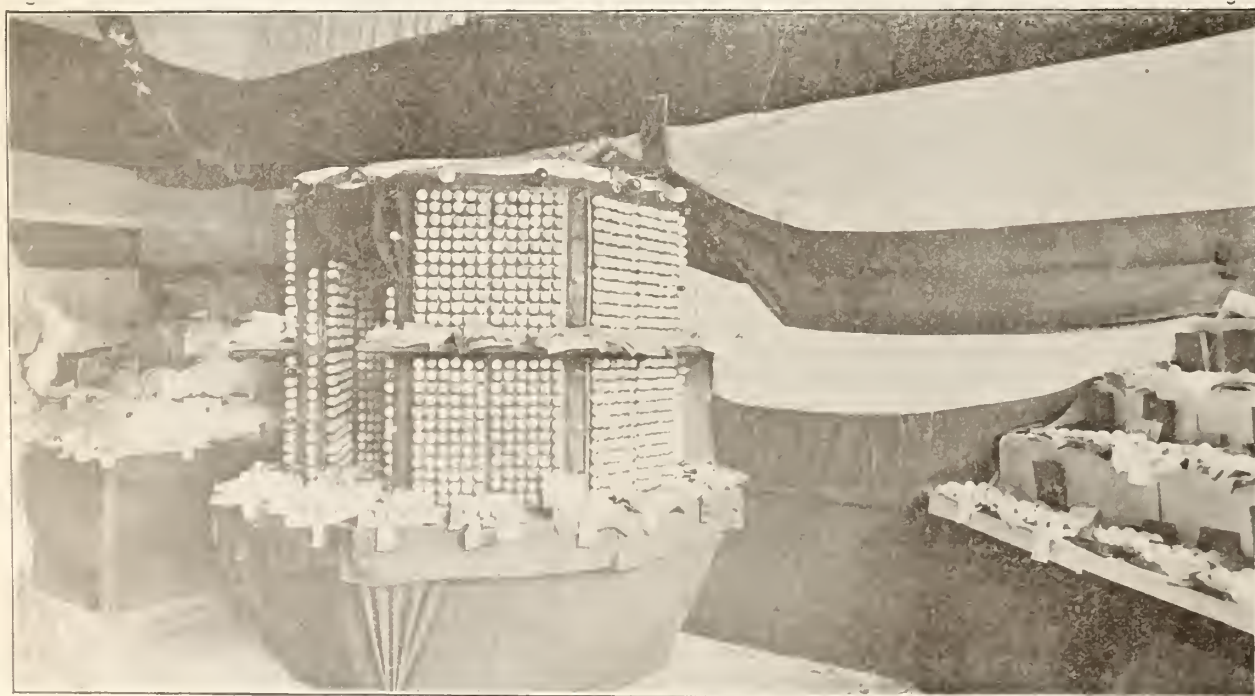
If I knew just what Mr. C. means by the "cult" I could tell better whether his idea of my relation to it is correct. Generally speaking, we assume that the

"cult" in any class—as poultry keepers—constitutes that element which, by reason of its special interest, whether sporting or commercial, is more wise to what is going on than the ordinary person interested in the subject. With this supposition of better working knowledge we sometimes also associate the idea that those of the "cult" are quite generally disposed to "work" the rank and file for their own advantage.

I do not think that it is possible upon this or any other definition that may be devised to separate those interested in poultry into two distinct classes: One "wise" to all the ways of the poultry world and the tricks of the trade, or rules of the game—whichever you prefer—and the other unversed in these things and chiefly qualified to play the role of sucker. The test of any such definition comes in its application to individuals. Very few individuals fall plainly into a class according to any simple specifications.

But, in a general way, we have one class of poultrymen and more or less near-poultrymen who conceive it to be good policy to promote, or at least not to oppose or criticize that which purports to be for the development of poultry interests, and it is this class, I imagine, that constitutes the "cult" with which my correspondent supposes I am not very popular.

Now I have never concerned myself about popularity, nor when it seemed clear to me that a thing ought to be said have I refrained from saying it because to say it would give offense. And no doubt many persons and groups have taken offense at statements I have made that were not calculated to promote their ideas or their interests as they appeared to them. But I do not think that my attitude has made me anything like as unpopular with this class of people as it has with the beginners and novices whose disposition to accept every supposedly new thing that is promising and at all plausibly presented makes them easy vic-



The Egg Display at the Boston Show, 1898

Owen Farms' Birds Are Famous

For their SUPERB UTILITY QUALITIES as well as being UNBEATABLE IN THE SHOW ROOM.

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BUFF ORPINGTONS
WHITE ORPINGTONS
WHITE PLYMOUTH ROCKS
WHITE WYANDOTTES
S. C. RHODE ISLAND REDS
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Have made records well over the 200 egg mark in the trap nests of my customers. They have bone, size, health, vigor and prepotency. They lay and pay, and will do equally well for you.

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Strong, sturdy, selected range grown cockerels, \$5, \$7.50 and \$10 each

Exceptional quality for the price and from best blood lines. Genuine bargains and worth more

Grand Exhibition Birds

To Win Any Show in America

370 Owen Farms' Birds Have Won First Prizes at Madison Square Garden, New York

Write me your exact wants and let me quote you

Carefully selected males or carefully mated trios and pens to produce youngsters of the highest class. Line bred birds at lower prices than you can buy birds approaching them in producing value.

Place your order early and have the choice of my large number of OLD and YOUNG BIRDS

Satisfaction Guaranteed Every Customer Every Time

And this guarantee is backed by my 26 years experience in selling thoroughbred poultry

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Send no Money JUST YOUR NAME ON A POSTAL

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MAKING POULTRY PAY

depends more on the knowledge you have of Poultry Culture than on expensive equipment or extensive space.

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Your Prize Winners—Your Egg Layers

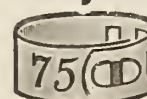
Must be kept growing. They need and must have the proper egg, bone, muscle, and feather developing feeds.

Orr's Poultry Feeds

are noted for their Purity and Freshness. Are the ideal feeds for the growing chick, molting, or laying fowl. The utmost in Poultry Feeds. Send for circular and price list.

Wm. Orr & Sons, Box 3, Orr's Mills, N. Y.

Adjustable Clinch



POULTRY BANDS

No better made. 25, 20c.; 50, 35c.; 100, 65c.; 200, \$1; 500, \$2.25. Numbered as desired. Samples free.

FRANK CROSS, Box 503, Montague, Mass.

tims not merely of the crooks and half-crooks, who are not very numerous, but of the errors and follies of well-meaning people who are themselves deluded in the things they offer for sale or advocate for practice.

The great majority of "beginners" in poultry keeping have been attracted to it by exaggerated statements of its possibilities. They do not know of its difficulties, and resent being told of them. They add to whatever plan may have attracted their attention a variety of notions of their own and then submit the resulting plan to someone supposed to be an authority. Ostensibly, the object of this is to secure expert criticism of the plan. Actually, in nine cases out of every ten the object of such inquiry is to secure the supposed expert's approval of the novice's plan. This is made very plain by the way the novice acts when he is given what he said he wanted. As a rule, nothing will shake his faith in the merit of his ideas, but he conceives a very poor opinion of an "authority" who cannot immediately see the merit that he supposes is in them, and he not only turns to some other source for "aid and comfort," but to the extent of his opportunity labors diligently to discredit a person or a paper that has given him unacceptable advice.

The prime reason why most poultry papers are vehicles for the discussion of all sorts of impractical and worthless ideas is because that is the sort of stuff that suits the average reader. I may add that the prime reason why the average beginner drops out of poultry keeping after a year or two is because he reads so much of this stuff that he becomes hopelessly confused on the subject. As a general rule, the novice who has taken offense because of my failure to indorse his plans and encourage him to follow them out will have nothing more to do with me either directly or indirectly. Only once in a long time does it happen that when he realizes that the advice I gave him was what he needed he comes back

to me for further advice. From what I know of a number of individual cases I suppose that most people in such circumstances prefer to seek sound advice from someone else who will not know how they blundered in spite of warning.

Those who may be considered of the "cult," who have taken offense at my plain speaking very seldom make it in any sense a personal grievance or allow it to in any way affect their personal relations with me. Some of the men with whom I often am at odds in print I count among my best personal friends. Many of those engaged in various lines of poultry business who consider the prevalent methods of promoting business the best business policy, still consider it advisable that with most papers following this policy, there should be a few—at least one—pursuing a different course, and by its conservatism and plain criticism restraining the general tendency to inflation of ideas in the poultry world. This is not my view of the sphere of this paper, but it is a not uncommonly expressed view of its function.

Indiana Poultrymen Meet

A special meeting of the Indiana State Poultry Association will be held at Purdue University, LaFayette, on Tuesday, January 11, 1916. This association meeting is part of the big poultry week held in connection with the Farmers' Short Course at Purdue. As is customary with the older live stock associations, one afternoon will be given over to the poultry association. Educational poultry lectures and demonstrations, given by the poultry division of the University, will occupy the balance of the week, and will bring together many of the poultry men and women of the state.

During the State Poultry Association section, there will be an endeavor to plan more constructive work for advancing the many poultry interests of the state. President A. E. Martz, of the association, will deliver the opening address. Frank E. Herring, member of the association board of directors, will have a special message to the members. Ed. S. Hobart, of Williamsport, will discuss the farmers' relation to the industry. J. F. Stras-

I've Been Building Incubators So Long that they call me the Daddy of Artificial Incubation



Principal
Not connected with
any other company.

When incubators were new I built them so good that my customers of those days are my customers today. From the very first I built the best incubator I knew how. It was the best incubator possible to build. My incubators today are better than they were then because I have learned how to build them better. Today my machines have no equal for hatching a strong, vigorous chick from every hatchable egg, for economy of fuel and labor, for appearance and for durability. And, best of all, for you

THE NEW BUFFALO INCUBATORS
and BROODERS, too

Let me tell you how one customer makes an income of \$1,569.89 with a Buffalo Equipment.

Here's a "human interest" story. Mr. Carter, a carpenter, after a long spell of sickness, that left him almost a cripple, undertook to make a living with poultry.

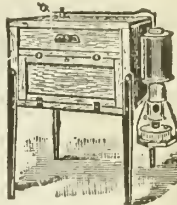
The fourth year he carried over 550 layers. The market eggs were all sold through a commission house. The yearlings brought 75¢ each. A few hatching eggs were sold. The total receipts were \$2,793.07. The total expenditure for the year was \$1,228.18. The net profit on the investment and labor \$1,569.89.

Everyone interested in making money out of poultry should ask for our circular.

are just as well built as any Standard Incubator on the market but cost 25% to 33% less. You do not need to pay more than my price for the best incubator your money can buy. You cannot get more real value no matter how much you pay.

The Buffalo Colony Brooder is a complete Home Chicken Raiser. Can be operated without shelter when it is 10 degrees below zero.

The New Buffalo Coal-Heated Brooder Stove and Hover, Price \$15, will brood from 100 to 1,000 chicks for less money than lamp-heated hovers. The control on this stove is perfect, and it requires very little attention.



Write for my circular now before you forget it.

CHAS. A. CYPHERS, Pres.
Buffalo Incubator Company
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HAYWARD'S
White Plymouth Rocks

Have been bred for utility and exhibition excellence for many years. They are profitable producers, and were in the front rank as up-to-date winners, making high records at Boston and Brockton this year. If in need of stock of high quality let us hear from you. We will quote reasonable prices and guarantee honorable treatment

W. F. HAYWARD,
WESTBORO, - - MASS.



THE OLD RELIABLE
LAMBERT'S
DEATH TO LICE

has been used over 30 years by
Successful Poultrymen
Because It Insures Clean Fowls

Is just the thing for sitters, as it does not harm eggs or chicks. Keep your hens free from lice and they will thrive and be profitable. 100 oz. \$1.00; 48 oz. 50 cts., 15 oz. 25 cts. Large sample of Powder or Head-lice Ointment 10 cts. "Secrets of Success with Poultry" by D. J. Lambert for 2c stamp.

THE KLEIN-LAMBERT CO., 426 Traders Bldg., Chicago

Mirimichi Quality
S. C. Rhode Island Reds
White Plymouth Rocks
and White Wyandottes.

Winners at New York, Boston, Brockton, Providence, and Attleboro. Cockerels, Pullets, Cocks and Hens that will win for you. Prices low. Satisfaction guaranteed. Catalogue free.

MIRIMICHI POULTRY FARM.
FOXBORO, MASS.
W. H. SAART, Manager.

Poultry and Pigeon Supplies
SAVAGE'S POULTRY FEEDS
ARE UNEQUALED

Fancy Birds for Breeding Purposes. Eggs for Hatching in season. Send for Catalogue.
C. T. SAVAGE,
67 North Market St., Boston, Mass.



The Egg Exhibit, Boston Show, 1899



Dough Cart on its Rounds on a Rhode Island Farm

SOME PROBLEMS OF EGG PRODUCTION

EDITOR FARM-POULTRY:—Your article "Increasing the Egg Yield in Large Flocks," in your October issue, reminds me that I have been very tardy in giving you further information regarding our flock as you requested. I am a very busy farmer and poultryman. I did not know just what information you wished, and to be exact, I did not know just what I wished to know about our flock for the reason that our new poultry house last fall was not completed until December, so we did not have a good show for winter eggs.

I thank you for your consideration of my letter of inquiry, and for the information contained in your article, which I think quite generally covers the subject. If it is not too late to further consider the subject as effecting our particular condition, may I give you that information now?

Our stock came from neighboring farm flocks which did not make a specialty of winter eggs, but stock was healthy and vigorous and came from well known strains. Our present stock runs large. We killed two abnormally large year old hens that weighed $5\frac{3}{4}$ pounds each. Have a few pullets that weigh $4\frac{1}{2}$ pounds at six or seven months. But I credited this size to what we call ideal growing conditions. Pullets have free range and a four acre black raspberry patch, with Cornell rations hopper fed.

Our seasons work with young stock was: March 8th, eggs tested 91% fertile, hatched 1550 chicks from 2200 eggs. From 1450 of these we raised 630 pullets, 624 broilers and cockerels. All chicks were hatched from March 30th to May 1st. Found first pullet egg August 8th. First lot of pullets (105) laid 30 eggs before they were five months old.

At this time (September 21st) we commenced putting pullets in winter house. By October 1st they were all in. But they have not gotten to laying as we expect. From 625 pullets we got from 30

to 45 eggs a day. There is an increase now (October 27th) for the last ten days. Before that, egg yield made no gain as a good number were laying when put in winter quarters. Would it be better policy to move pullets to winter quarters before they are matured and start laying? Would the effect upon egg production be less? For the best results in fall and winter eggs what do you consider the right time to house the pullets, and the right time for them to commence laying?

Our houses are large, well lighted, and ventilated; 850 birds have 4,000 square feet of floor space, dust pens and free range when they choose. They are kept in flocks of 250 to 300 birds.

Our feeding system is from 64 to 70 quarts grain in deep litter at night (four o'clock) mixture of three measures wheat to two measures cracked corn. I am undecided as to the proper amount at this feeding, as Cornell recommends just what the hens will clean up at night with a light feed in the morning—one pint to every 30 hens. But recently I visited a large (2800 hens) and very successful plant where the egg yield is known to be large. Their system was to feed at night all the birds would clean up by about ten o'clock the next morning. We wish to feed all we can at this feeding and still have the birds active and eat a right amount of dry mash. This seems to be one of the problems of the dry mash system, and with us comes only at this time of the year. As heavy egg production starts in February, the hens seem greedy for the dry mash and will readily eat one-half as much mash by weight as of grain.

In the morning we feed ten quarts oats. At present our flocks (850) are eating about 36 pounds of dry mash a day from hoppers open at all times, of a mixture of 100 pounds each of standard bran, 14% protein, (guaranteed analysis in each case); flour middlings, 17% protein; best beef scrap, 50% protein; gluten feed, 23% to 25% protein; and corn meal; 25 pounds each of linseed meal and alfalfa meal; and 2 pounds of salt. Will you kindly criticise this mash? Is this mash better for the oil meal and alfalfa? We



"Star-Egg-O Keeps Us Always on the Job"

Star-Egg-O tones up the fowl's system, aids its digestion, and helps it through the moult. It is the Egg Tonic that puts the eggs in the basket and the dollars in the bank. Packages 25c, 50c, and \$1.00.

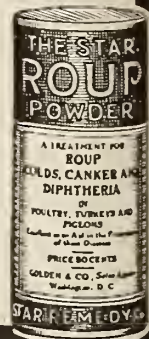
THE STAR ROUP POWDER

is just the thing to have around at this season of the year, because it will prevent and cure the Roup. Packages 25c, 50c.

The Star Poultry and Live Stock Tonics, Remedies and Foods are a superior line for the poultryman and live stock breeder. Send for catalogue. If your dealer can not supply you, write,

GOLDEN & COMPANY, Sales Agents,
WASHINGTON, D. C.

"Each package is its own guarantee and you don't want your money back"



intend using our alfalfa cut fine instead of buying the meal. Should the oil meal be put in every mixture? With corn meal, gluten feed, and white hominy, with respectively \$28 \$28 and \$30 — (at Buffalo freight 13 7.10 cents per 100) has one any advantage over the other in a mash? Would a mash be just as good having only corn meal of the three? Is the proportion of beef scrap right, and does the bran give bulk enough without the alfalfa meal?

October 28th. Today I have increased night feeding to 76 quarts;—this leaves a little in litter for morning—and have

changed grain mixture to equal parts cracked corn and wheat (wheat at \$1 a bushel and corn at \$30 per ton). Also have put beef scrap in hoppers open at all times, and at noon feeding fine cut alfalfa scalded, with a small amount of regular mash mixed in.

All this "a-do" about our system, etc., is to determine if our management is right, were our pullets hatched at the right time, and other conditions which effect winter egg production as they should be. (A man from Cornell looked our pullets over and selected our breeding pen August 15th. He said that our pul-



DO IT NOW!

Don't wait until the last minute and think you will be able to get February, March or April chicks. For several years we have always been booked up to our full capacity weeks ahead of our shipments, and orders are now coming faster than ever. Our capacity of 50,000 eggs at one hatch will be again taxed to the limit of production. Remember we have only one breed

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and they are straight American Bred Leghorns; no mixtures with foreign blood. We have tried out the others and are satisfied that the American Leghorn is the finest in the world when properly bred. By practicing a little patience the American Leghorn will lay more eggs, lay larger eggs, lay whiter eggs, and look better than any other type of Leghorns on earth.

We are trapnesting every good bird on our farm, and have quantities of birds that beat 200 eggs. We own the fourth winning pen at Storrs 1915 Laying Contest. This pen of ten Leghorns averaged 196.2 eggs. We were only 11 eggs behind the winning pen. Three seasons ago, without trapnesting, we averaged for every pullet on our farms during their first laying year, 172 and a fraction eggs. Not only is our strain bred to lay, but they are bred for quality and size of egg, and our strain will weigh more than the average.

We have built up the largest business on White Leghorns—with possibly one exception—of any breeder in the country, and we have done this, not by yellow advertising, but by giving honest value to every customer. The secret of our success is that our customers usually make good with the stock we ship, and our customers are our friends who stay by us year after year.

READ THIS TESTIMONIAL

Huntington Hill Farms, Roxbury, Conn., Oct. 16, 1915.

The Everlay Farms, Methuen, Mass.,

Gentlemen:—The 300 chicks I bought from you last spring have done splendidly. We raised over 90% of them, got a high percentage of pullets, and these pullets are now laying over 40%. You certainly are to be congratulated on your stock, and I have taken pleasure in recommending your birds to a number of friends. I shall probably need a number of chicks next spring, and you will hear from me when I know definitely what I am going to do.

I want to try breeding from a few of the more mature pullets, and to do this will need a few cocks, yearlings, or two year olds. Have you anything in that line at present, and at what price? With best wishes, I am, very truly yours,

F. HUNTINGTON CLARK.

We have hundreds more testimonials received this year just as good.

WHY TAKE CHANCES IN PLACING YOUR ORDER FOR CHICKS

to save a cent or two cents a chick? Our chicks are the cheapest in the long run because they live and mature into fine, healthy, good sized pullets that will average to lay you as many or more eggs than any other strain you could buy, taking your flock record.

Another reason for our success has been our reasonable prices. They vary from 13c. to 17c. a chick, according to whether you buy in lots of 25 or 5000, and the prices are just the same in February, March, April, and until the 15th of May. After May 15th our prices are: 10c., 11c., and 12c.

WE SHALL HATCH

5,000 Chicks a Week in February 10,000 Chicks a Week in March
12,000 Chicks a Week in April 12,000 Chicks a Week in May

EGGS FOR HATCHING—90% guaranteed fertile at only \$8 per 100; cheaper in 1,000 lots. Special matings from high class record layers, the finest on our farms, \$3 and \$5 per sitting.

400 SLENDID BREEDING COCKERELS that will weigh $4\frac{1}{2}$ to 7 pounds; all bred from grand layers, \$3, \$5, and \$7.50. If your Leghorns are small send to us for one of our six or seven pound cockerels to improve your size.

75 YEARLING COCKS—grand utility birds at \$5 each; a few extra quality at \$7.50.

LAYING PULLETS FROM \$2. We make a specialty of mating up trios, pens, etc., and these birds have got to please you or your money back. Satisfaction guaranteed to every customer.

SEND FOR OUR 96 PAGE CATALOG which fully describes our Leghorn plant. It is well worth \$1 to every new beginner. Free for the asking.

THE EVERLAY FARM, Box 240-C, METHUEN, MASS.



Breeding Ducks at Weber Bros.' Farm, Wrentham, Mass.

lets were a fine lot). We believe that our egg production is under what it should be—100 eggs per hen. We know that our feeding system has been at fault. But it does not seem that our present low egg production could be altogether due to that. For this reason we wish to get our management and feeding right and determine if the fault is in the stock.

If so, how may we improve our stock? One Cornell man says in answer to this question: Cull early molters, and select by other exterior characters. There was an article describing this method in a poultry number of *Cornell Countryman*, published about six months ago, by Professor Rice, if I am not mistaken. (I am glad to see an article by Professor Rice in your paper, and hope to see more of them). One looking to the poultry press for the solution of a problem like ours finds these terms: "Strains of high producers," "Hens bred to lay winter eggs," and about mating your flock with cocks from high producing hens. What do these terms mean other than popular phrases in up-to-date advertising? It is now that the question arises: Just what has been proven by the trap nest? To what extent does a high producing hen transmit her power to lay eggs, and how? In all these considerations I take it for granted that constitutional vigor is the foundation of all productiveness. Then is it just as well to get your stock from healthy specimens which are low producers? (I take it for granted there are such). Or is there a short cut by way of the high producing hen, and if so, how much of a short cut shall we take?

F. E.

The case Mr. E. presents brings up questions the satisfactory discussion of which would fill an issue of a poultry paper, or fill the time in a protracted session of a poultry institute. The best that I can do with the case at this time is to take up the most important points and the direct questions and make comments and replies to give my views or the facts as I understand them without attempting to give reasons at all fully.

The ideal way to handle pullets to have them begin laying promptly at maturity and avoid breaks due to changes in conditions of life is to put them into the quarters that they are to occupy as layers while they are quite small. The difficulty in doing this is that the houses for laying and breeding stock are usually needed for the old stock until mid-summer at earliest, and many are not available for the pullets until late in the fall. We have to do the best that we can under such conditions, and against losses of pullets' eggs on account of the unfavorable effects of change upon some pullets that have laid, or are near laying, we must put eggs produced by the old stock that is keeping the pullets out of the laying houses. Then, too, it is not usually possible to have all the range desirable for growing stock attached to winter houses.

While there is nearly always some check on laying when stock is moved at this season, I am inclined to think that in this case the feeding has more to do with it than the change of quarters. Apparently Mr. E. came to this conclusion, for in his postscript he tells of increasing the amount of food. It is always safest to feed in such amount and way that you are sure the birds all get enough to eat without working too hard for it. I very much prefer the plan of the farmer who feeds grain enough to last until 10 A. M. next day to the plan of feeding to have the hens clean up the grain at night. Indeed I think that it is often a good plan to give the birds cracked corn

where they can eat it freely just before dusk, so that by the way they eat this you can tell how near they can get a full meal when they have to scratch for it. If—as I understand it—Mr. E. feeds his pullets grain in hoppers while on range, and changes to grain in deep litter when they go into winter quarters, it would be some days before they would acquire the habit of working the litter. In any case it is desirable to frequently test by such practice whether the stock is getting full meals or simply eating for its bare requirements.

Also, I think it better to feed hard grains more liberally and not skimp the hens on them to force them to eat more dry mash. In the dry mash described I would substitute ground oats for the gluten and use only half as much beef scrap, or if ground oats are not available substitute fifty pounds each of corn meal and bran for the gluten.

The terms high producer and low producer as now commonly used do not seem to me to mean much in practical breeding operations. Early winter egg production depends primarily upon having the pullets ready to lay at the beginning of winter. To do this, they must be hatched within a comparatively short period in the spring. The heaviest layer can produce eggs for chicks to come out in that period that will give usually not more than a dozen pullets hatched at the time desired that will mature and pass on careful selection. With operations on a large enough scale it is not so important to get the pullets out so nearly together because each lot is always large enough to justify giving it all the attention it requires.

A COMPARISON JUDGING SCORE CARD

WITH a personal letter, J. H. Drevestadt sends me a copy of the latest improved "Rosecroft Comparison Judging Score Card" devised by Alfred D. Robinson, Point Loma, Calif.

A "comparison judging" score card, using those terms as they are commonly used, is an absurdity. The absurdity of such a description might be redeemed if the proposed system was of plain merit. It does not seem to me to have that quality.

This card divides the specimen into three sections, each of these being again divided into shape and color. The head and neck constitute one section; the wings, back, and tail another; the breast, body, and fluff, legs and toes the third section. The rule for scoring is: "For a perfect section mark 5, excellent 4, very good 3, good 2, fair 1."

The following explanations of the system, and additional directions for the use of the card, are printed on the reverse:

Judging by Comparison

In the use of this score card, the specimen that is best in each section should first be found and the rest of the class scored to it, always bearing in mind the *Standard* requirements.

Remember this is for comparison work and not to take the place of the score card system as detailed in the *Standard of Perfection*.

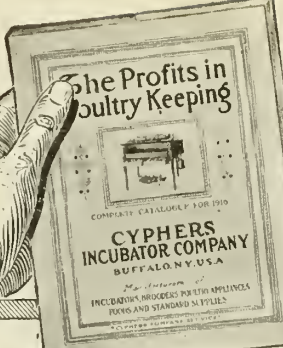
We would also emphasize that in our opinion the art of judging lies in the rewarding of merit, rather than in the discovery of defect, and that the comparison judging is rapidly replacing the score card system everywhere because of this very thing.

Comparison emphasizes merit. It says: "This is the best bird." The score card

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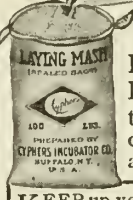
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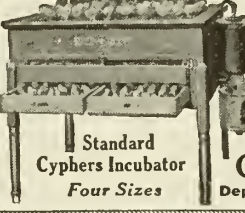


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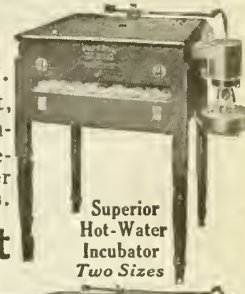
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36 Bromfield Street, Boston, Mass.

emphasizes deficiency. It says: "This bird has the least defects."

Not being a professional poultry judge my views on matters relating to judging have to stand on their own feet. I have neither the title nor the license to prop them up. But as I understand the English language and the common processes of judging exhibition poultry, no other method of judging has ever been devised that could so thoroughly befuddle a judge as this plan of finding the best section in the class and taking it as a model. The

directions are very brief, not at all explicit, and susceptible of a variety of interpretations. According to the card, there are but three sections to be considered in making the score, and in each of these shape and color have equal value. There is also a division of "size, condition, type," with space for marking its valuation, but how this is to be "scored" is not plain. On the face of the instructions it would appear that the judge is to select as his patterns three, or, perhaps, four birds. But as he has to consider *ten* sections while marking only three, it is

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obvious that the patterns will vary in many particulars, and that no uniformity can be secured.

If he selects the bird with the best head and neck as the pattern for deciding the value of heads and necks he will often have his model poor in one particular. When it comes to selecting where more sections are grouped, there will be still more difficulty in getting the desired general excellence. It will often happen that the pattern bird is not the best in the class in any particular. It would be a gross perversion of the use of standards to score to the best bird in the class, except in case that bird was perfect. It would be absurd to undertake to select the pattern birds according to the Standard and then use these as the standards for the rest of the class. As a matter of fact, unless the few pattern birds were conspicuously better than the rest of the class their value as patterns could only be determined by scoring all the likely can-

A FEEDING EXPERIMENT

A REPORT of a feeding experiment at the Idaho experiment station, which has just come to hand, suggests the need of again calling attention to the extremely amateurish character and quality of much work with poultry that is being done at such institutions. We quote the report in full:

First Year's Feeding Test at the University of Idaho, 1914-1915.

The purpose of this experiment is to test the value of different feeding rations, to determine the influence of rations upon egg production, general condition of the fowls, weight of eggs, and to determine the cost of maintaining laying hens (for best results) under Idaho conditions.

Farm practice generally is to allow fowls to rustle for themselves and, as a rule, they are fed the feeds that are grown on the farm. The average farm



Administration Building of the Poultry Department of the New Jersey Experiment Station

didates according to the Standard. When that has been done the judge has practically judged the class.

Quite a number of judges and fanciers have taken the view that it is the function of the judge to reward merit, not to look for defects. That may be a good principle to work on in some things where there is no relation between the merit to be rewarded and certain faults; but in exhibition poultry, for which a high standard is made, merit is secured by the elimination of defects.

As applied, the Standard perhaps unduly penalizes some small faults; but it is not correct to say that score card judging emphasizes deficiency and comparison judging emphasizes merit. If there is such a difference between them it is the other way.

flock of Idaho is fed wheat, and wheat alone, with no variety whatever in the ration. Idaho can produce profusely all of the necessary feeds for a well balanced and economical poultry ration. Kaffir corn is the only grain used in the experiment that cannot be grown extensively, and it is said that it is a good crop in many sections of the state.

Complicated tables, computed from feed formulas figured by their nutritive ratio, are not used in this experiment in reporting results. These tables are very nice and interesting, but we find that the farmer is not particular about analyzed formulas; what he wants to know is just what feeds to feed, and in what proportion to feed them, to secure best results.

Three pens of thirty fowls each were used under like conditions and fed differ-

ent rations, wheat being the basic ration. These fowls are White Leghorn pullets, all of the same breeding, being all produced from the same breeding pen.

Pen No. I was fed as nearly in conformity with average farm practice as is possible in experimental work. They were fed no mash, but were provided with grit and green food on the same basis as the other pens.

The rations are as follows:

PEN I.
GRAIN.
15 parts wheat
2 parts oats
2 parts barley

PEN II.
GRAIN.
12 parts wheat
2 parts peas
3 parts oats
2 parts barley
1 part kaffir corn
1 part millet
½ part sunflower seed
1 part buckwheat

MASH.
1 part wheat meal
2 parts bran
2 parts white shorts
1 part corn meal
2 parts fish meat meal
1% charcoal (check)

PEN III.

Pen No. III was fed on the same ration as Pen No. II, only that the peas in the ration for Pen No. II was substituted with corn for Pen No. III.

All of the material for the mash was ground very fine and fed in open hoppers. The grain was fed in deep litter, about eight quarts per day per one hundred fowls, making about one-third mash (by weight) to two-thirds grain. Pen No. I getting no mash.

Pens No. II and III were fed all of the green food, bone, oyster shell, and grit they would consume. Pen No. I getting only green feed and grit.

The experiment started November 1, 1914, and closes October 31, 1915. The work is not as yet complete, but the results obtained to the first of October, with but one more month to run, are certainly conclusive as far as this year's work goes.

Following are the results in egg production:

Pen No.	Under 2 oz.	2 oz.	Over 2 oz.	Total	Average
I	492	245	1	738	24 3-5
II	187	3101	122	3410	113 2-3
III	263	3466	127	3856	128 8-15

It can be seen from the table that Pen No. I produced a very small number of eggs and that they averaged a high percentage of small eggs. Hens under farm conditions with the ration of Pen No. I would do much better, but where taken into account that these fowls were all confined to small lots (50 ft. x 50 ft.) it can be seen that there was no possible chance for them to secure any foods aside from what they received by the regular method of feeding.

On the farm fowls run at large and are able to pick up much in the way of ani-

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by keeping your fowls in condition. You can make them eat, digest, grow and lay better by mixing a small quantity of

Sheridan's CONDITION Powder

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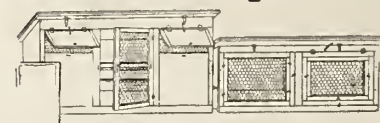
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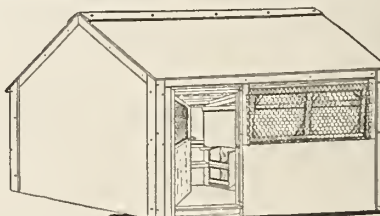
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Fiske's White Leghorns

2000 YEARLING HENS AT 90c. EACH

My Single Comb White Leghorns are noted for size, stamina, and as layers of large white eggs. I have two thousand yearlings weighing 4 1-2 to 5 lbs. each that I will sell in any number desired at ninety cents each. Order at once. If you are not ready to take them now, make a deposit and I will ship when you are ready.

HARLO J. FISKE, Box 6, West Springfield, Mass.

mal and mineral food, such as bugs and worms, gravel and charcoal.

These results would indicate that animal food in some form is absolutely necessary.

In the early months of the experiment it seemed that Pen No. II would easily excel in egg production, but when they came to high production they were unable to maintain body weight, and when they began to drop off in weight, egg production dropped off. Egg production in Pen No. II would go down very low, then the fowls would come up in weight and egg production increase. Pen No. III maintained a more uniform weight and laid more eggs.

These hens were weighed on the last day of each month throughout the year, and these observations certainly indicate that hens require flesh to produce eggs. Each hen was weighed separately, and her individual record kept, in both egg production and the weight of the hen.

These egg records are not large in any instance, which may be accounted for from the fact that the pullets used in the experiment were very young and immature at the time they were placed on test, some pullets weighing less than two pounds. They were very uniformly distributed,

that common farm practice in Idaho is to feed wheat with occasionally a little oats or barley, or both. To give a flock of thirty Leghorns a very close approximation to general farm conditions, all that was necessary was to give them a yard large enough to supply the green food they needed. Such a yard would also supply enough animal food in the form of worms and insects so that even if the hens did not have all the animal food they would eat they would not suffer seriously for lack of it. It might not be entirely convenient to give an experimental pen of hens such a yard at the college poultry plant, but certainly it could not be impossible to use a bit of land of sufficient size upon which alfalfa or other grass was good enough to equal ordinary farm conditions, that could be used for this purpose for the period required for such an experiment.

A thing that puzzles me is why animal food, as well as green food, was not furnished to Pen I. Why make provision to overcome the fault of the situation in one particular and not in another equally important? Another thing that puzzles me is, how it was possible to get as low an egg yield as the average of 24 3/4 from this pen. For while it is unquestionably



Some Owen Farms White Orpingtons

vided, however, the three pens weighing within three and a half pounds of each other.

The origin and former breeding of this strain is unknown, so far as any records at the university is concerned. They are, however, good quality fowls, many of them being splendid exhibition specimens.

At the meeting of the instructors and investigators in poultry husbandry at New Brunswick, N. J., a few years ago, as a visitor accorded the privilege of taking part in the discussions, I felt it incumbent upon me after sitting through several sessions, to call the attention of the investigators to the fact that in far too many cases their experiments, being carried on under intensive conditions, were either made unsatisfactory by those conditions, or the results secured were of little or no value to farmers and poultrymen operating on a large scale.

The statement is made here that Pen No. I was fed as nearly in accordance with average farm practice as is possible in experimental work. Presumably this is intended to refer to farm practice in Idaho and vicinity. Throughout the United States generally, corn is the principal poultry food. In many parts of the far West wheat is more available, and often at prices that make it the cheapest food. It would appear from this report

desirable that fowls should have animal food, the lack of it is not so immediately detrimental to either egg production or growth, as the results in egg production in this case seem to indicate. Almost any old stock of fowls, no matter how poorly grown, or how cared for, or how fed — provided they have enough to eat of some common food — will lay 60 to 70 eggs each in the spring months. I have had Brown Leghorns kept on an exclusive wheat diet for a period of over a month—covering the month of March—lay during that month more eggs per hen than this Pen I did during a whole year. I was sick at the time and the hens were fed by a person not accustomed to the care of poultry, whose only instructions were to see that the hens got all the wheat they would eat. It is quite common to find very good egg production in winter from hens that are fed freely but not judiciously. Hens kept that way often lay much better for three or four months than hens fed a nicely balanced variety, but with the quantity limited for fear of overfeeding. If these Idaho hens were handled right in other respects the difference between them and Pen II, on account of lack of animal food should not have been greater than two or three dozen eggs per hen. And that would be ample to show the advantage of animal food in the ration.

Prevalence of White Diarrhea

(Continued From page 244)

stock, such as high bred, inbred, and poorly bred; also by improper brooding and improper feeding. I take no stock in the theory of transmission from the egg, and shall not have my hens tested for *bacillus pillorum*. I believe the cause for 'white diarrhea' can be placed in every instance without an extended scientific research."

From Arthur G. Duston, Proprietor
Rose Lawn Poultry Farm, White
Wyandotte Specialist Breeder,
South Framingham, Mass.

"Your word relative to 'white diarrhea' was lost, but I will say I never had it as far as I know. My chicks come strong and thrifty. I also send eggs all over the country and never hear of my customers losing any except from natural causes, such as cats, pigs, etc."

Poultry Show Dates

New England States

- Dec. 1-4. Providence, R. I. W. I. Brown, Sec'y.
- Dec. 2-4. Chelsea, Mass. H. C. Green, Sec'y, Everett, Mass.
- Dec. 8-11. Woonsocket, R. I. A. J. Richards, S'y.
- Dec. 8-11. Portsmouth, N. H. C. S. Long, Sec'y.
- Dec. 14-15. Northampton, Mass. J. H. Pierce, S'y.
- Dec. 14-17. Derry, N. H. E. A. Cross, Sec'y.
- Dec. 16-18. Westbury, R. I. Roger Dunham, Sec'y.
- Dec. 23-25. Berwick, Me. A. C. Brooks, Sec'y.
- Dec. 28-31. Manchester, N. H. O. W. Carey, S'y.
- Dec. 30-Jan. 1. Meriden, Conn. R. D. Marsden, Sec'y.
- Jan. 4-6. Bridgeport, Conn. John K. Slack, Jr., Sec'y.
- Jan. 11-15. Boston, Mass. W. B. Atherton, Sec'y.
- Jan. 12-13. Marlboro, N. H. William Coutts, S'y.
- Jan. 18-19. Amherst, Mass. W. H. Abbott, Sec'y.
- Jan. 19-22. Lawrence, Mass. F. J. Barneman, S'y.
- Jan. 25-27. Lenox, Mass. Steve C. Brughardt, S'y, Interlaken, Mass.
- Jan. 25-28. Dover, N. H. E. H. Quimby, Sec'y.
- Jan. 26-29. Worcester, Mass. Chas. H. Wood, S'y.

North Middle States

- Dec. 6-10. Palace Show, New York City. L. D. Howell, Sec'y, Mineola, N. Y.
- Dec. 7-9. Hammonton, N. J. M. K. Boyer, Sec'y.
- Dec. 7-10. Johnsonburg, Pa. H. L. Roussey, S'y.
- Dec. 14-17. Newton, N. J. J. S. Roc, Sec'y.
- Dec. 31-Jan. 5. Madison Square Garden, New York City. Chas. D. Cleveland, Sec'y, Eatontown, N. J.
- Jan. 11-14. Ogdensburg, N. Y. Chas. W. Loomis, Sec'y.
- Jan. 17-21. Corry, Pa. Guy M. Simmons, Sec'y.
- Jan. 19-22. Media, Pa. J. W. Keller, Sec'y.
- Jan. 26-30. Sidney, N. Y. A. E. Vandervost, S'y.
- Jan. 27-Feb. 3. Rochester, N. Y. J. W. Chapman, Sec'y.

Southern States

- Dec. 13-18. Lake Charles, La. B. F. Hendricks, Sec'y.
- Jan. 10-15. Charleston, W. Va. Julien C. Byrd, Sec'y.
- Jan. 11-14. Norfolk, Va. L. C. Page, Sec'y.
- Jan. 25-28. Warrenton, Va. M. J. O'Connell, S'y.

Central West States

- Dec. 1-5. Terre Haute, Ind. Harry Forbes, Sec'y.
- Dec. 7-10. Joplin, Mo. Fred Crosby, Sec'y.
- Dec. 7-10. Two Harbors, Mich. Fred Thias, S'y.

(Continued on page 254)

BLUE HEN
Saves More Chicks

THE MANSE FARM,
North Reading, Mass.
I have used all kinds of brooders, including several makes of colony brooders. Last season I purchased two Blue Hens. They have proved the best and most reliable brooders I have ever used. On March 31st, I put 1,000 White Rock chicks under them; ran until May 15th without any further adjustment. I have raised the largest percent of chicks in all my thirty years' experience. I can honestly say the Blue Hen Brooder is the best. I will add another next season.
H. W. WEYMOUTH.

As Large as Any \$30 Brooder

Heavy, cast iron heater having thick walls which will neither burn through nor crack. Three large grate bars, rocking and dumping type—grate area three times as large as other brooders. Assures steady fire which cannot choke up with ashes. Accurate automatic heat regulator and thermometer. Easy to get at all parts for cleaning—hove! raises up and down. Warm's largest floor area without overheating room.

WATSON MFC. CO.,
Drawer 24, Lancaster, Pa.

Manufacturers of Blue Hen Brooders (hot air and hot water), Blue Hen Round Tray Incubators and Round Tray Mammoth Incubators.

Guaranteed satisfactory or your money back.

HOVER RAISED

\$14.50



SAND'S
S. C. White Leghorns.

Orders for Pullets for Fall Delivery Accepted Now at \$12 to \$18 per dozen. Some fine breeding cockerels for sale at \$1 to \$3. Some of my last year's breeding hens at \$1.50. All my birds are bred for egg production and standard requirements.

LEROY E. SANDS POULTRY FARM,
Hawley, Wayne Co., Pa.

Rockwood's Buff Wyandottes

Won again at Springfield, Mass., 1st, 3d, and 5th cockerel in a class of seventeen.

Plenty of Cockerels for Sale \$3 and \$5 each

Buy now while prices are low.

FRED ROCKWOOD,
SOUTH BROOKLINE, N. H.

EGGS All Winter

You can make your hens lay all winter. Thousands of poultrymen are doing so, and making big profits from high priced eggs. Your hens will produce lots of eggs if you give them

Pratts POULTRY REGULATOR
IT MAKES HENS LAY

Cost only a cent a hen a month. The world's one great winter egg producer. Keeps the flocks healthy, active and laying. Prevents disease. Test it at our risk. It costs you nothing if you are not satisfied.

25 lb. pail only \$2.50, Large \$1.00, 50c and 25c packages. Pratts Roup Remedy and Pratts Poultry Disinfectant prevent roup, colds and other diseases. Pratts Roup Remedy, tablets or powder, \$1.00, 50c and 25c. Pratts Poultry Disinfectant, \$1.00 per gallon, 35c per quart. Refuse substitutes. Insist on Pratts.

PRATT FOOD COMPANY
Philadelphia Chicago Toronto
411

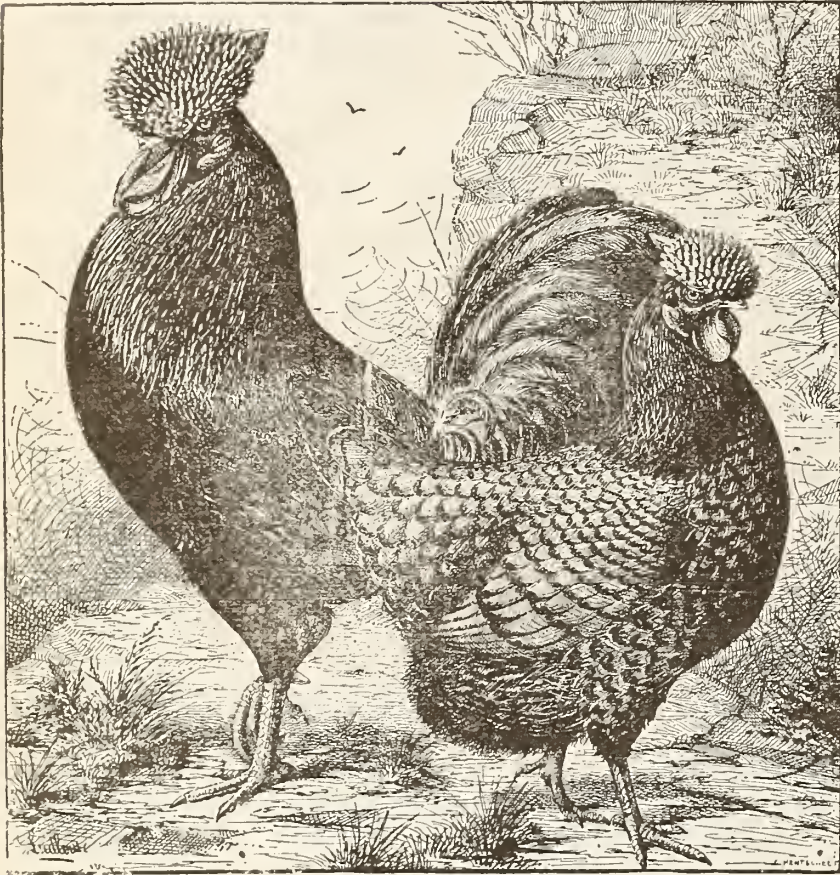
WHAT IS A "STANDARD" POINT?

IN 1867 the "American Poultry Society" is said to have adopted a "Standard of Excellence" based upon standards adopted by the London Poultry Club, "with alterations and additions adapting it to America." The publisher of this Standard was A. M. Halsted. In this Standard of Excellence the "points" in each breed always aggregated 15, though the number of "sections" varied from 4 to 9.

The American Poultry Association, nearly a decade later, adopted a scale of points in which 100, instead of 15, was taken as the measure or symbol of perfection, and divided the fowl into a greater

matter carefully, had given each section its proper allotment of points. But when a later convention decides that one section should be changed, there is only one thing to do;—100 points being the symbol of perfection in "Standard" fowls, if the number of points allotted to one section is judged to be excessive, the excess must be put on some other section.

I shall never forget that bunch of "Standard makers" trying to decide where to put the points they had decided ought to be taken from one section. But I never fully realized what was the cause of all the trouble until I had to try to explain the systems of judging in a text book statement. Then a little careful study of them made it plain that the "scale of points" was not a factor in computing "Standard" values of fowls.



English Red Caps

number of "sections," each assigned to numerical valuation in the "scale of points."

From that time to this the idea that the "scale of points" for each class or variety is of fundamental importance in estimating the "Standard" quality of a specimen has been carefully cultivated. Nearly all discussions of methods of judging, and courses of instruction in applying the "Standard of Perfection" purport to be based upon the "Standard" scales of points.

It is characteristic of human nature to accept whatever is commonly accepted or asserted as so until something happens to awaken doubts. I got the first severe jolt to my acceptance of the conventional idea that the "scale of points" is the basis of values in "Standard" fowls, at the meeting of the A. P. A. at Rochester, in 1904. Somebody ventured the opinion that the number of points allotted to a certain section was out of proportion to the real importance of that section. Everyone present interested in the matter agreed. (At A. P. A. meetings it is the rule to agree with everything that you are not prepared to fight.) Having taken a point or two from this section the problem before the convention was to decide what to do with the superfluous points.

The supposition was that some previous convention, having gone over the whole

In writing about poultry matters my method has always been: First to find out the facts; then to try to make a plain statement of them. In many matters, "the facts" mean generally accepted opinions or theories. Unless he is prepared to show that these are wrong, the only thing for a writer of books to do is to accept them and state them as best he can. So when it was necessary for me to explain the several systems of judging, I started to work on the assumption that the score card system is based upon the scale of points, and I worked for weeks and weeks trying to make an explanation of this system, in line with the many expositions of it that have been made by poultry judges, that would stand the test of lay criticism,—of the criticism of novices in poultry and judging who are not able to comprehend the score card method as usually explained.

I couldn't do it. Perhaps someone else could; but so far as I know, no one else ever has. I could not get any statement of the score card method that would meet the situation until I quit trying to make such a statement based on what judges using the score card say they do, and based it upon what they actually did. Then it was easy; for when you state what the judge does you eliminate the "scale of points" as the basis of his work, and when the scale of points is put

in its true relation to judging, the nature of the "point" becomes apparent.

Although the "Standard" makers have for forty years been treating the "point," and the "scale of points," as basic in determining merit, they have never defined either. The constantly enlarging "glossary of technical terms" has always contained many terms applied to poultry that are not "technical" and are not used in the book, but never a definition of "point" or scale of points."

I often wonder whether this has been an oversight, or whether revision committees that undertook to give the definitions found the difficulty of making definitions to suit the theory of score card judging insurmountable. Of course it may be assumed that the reader is to understand that if a term used in the book is not defined in the glossary, that term has no peculiar technical meaning, and the reader will go to the dictionary. But if the reader goes to the dictionary he finds that the only definition of point that applies to the case is one that does not seem to fit well the way in which

"point" is used in the Standard. It is: "A unit of counting in the scoring of a game or contest."

What the judge does in scoring is to discount for failure of the bird to meet the specifications of "the Standard," which specifications generally are very loosely phrased and admit of wide differences in interpretation. The method of doing this was described in the earlier "Standards" as "deducting such per centum for defects, as may be apparent, from the full value of a perfect bird." As stated in the latest "Standard" it is "DEDUCTING FROM THE FULL VALUE OF EACH SECTION OF A PERFECT BIRD, FOR SUCH DEFECTS AS ARE FOUND IN THE SPECIMEN."

That is one of the worst of many examples of blundering inaccuracies of statement that have characterized the "Standard" from the first. It seems quite plain that for specimen we should read section.

Following this comes the statement: "Judges must familiarize themselves with the scale of points of each breed

POULTRY BOOKS

By JOHN H. ROBINSON

"Unquestionably Mr. Robinson has written the best books produced in America to date on practical poultry subjects."—Reliable Poultry Journal.

Poultry - Craft

Mr. Robinson's first book was begun in the summer of 1897 and was published in November, 1899. Its aim was to meet the demand for a book that would give one interested in the subject an intelligent understanding of its possibilities and a comprehensive idea of methods of production, and which would give the beginner detailed information as to "What to do, and how to do it." Written while the educational poultry movement was in the incipient stage, this book—as the title page announced—was designed to be a text-book for poultry keepers rather than for students in classes. The arrangement and treatment of the subject were adapted to the individual teaching himself with home practice. The book was, however, extensively used as a class text-book, and is still so used by many instructors who prefer a more elementary book than the author's "Principles and Practice of Poultry Culture."

"POULTRY-CRAFT" is emphatically a POULTRYMAN'S BOOK FOR POULTRY KEEPERS. Before beginning it the author had had seven years experience in commercial poultry keeping, and he did not take up poultry journalism as a profession until after he had completed this book. It is the product of a working poultryman who was a student of every phase of his work. For those who want to learn with the least effort what they need only for their own practice it is still the most satisfactory book. 272 pages; 94 illustrations. Price \$1.50.

Principles and Practice of Poultry Culture

This book was written primarily as a text-book for agricultural colleges, but with the idea of making it appropriate also for general readers requiring a thorough treatise on the subject. Mr. Robinson undertook the work of writing it most reluctantly after he had for several years urged various instructors to prepare a text book on lines better adapted to their work than his "Poultry-Craft." As none of the instructors acted upon the suggestion, and the use of "Poultry-Craft" by students was increasing, he made arrangements with Ginn and Company to publish such a book as he would wish to have taken as his contribution to higher education in this subject.

"PRINCIPLES AND PRACTICE OF POULTRY CULTURE" was commenced in 1907 and published January, 1912. The author spared no pains to make it as concise and complete as possible, and to secure the most careful accuracy in every statement. After the book appeared, one reviewer said of it: "Although it extends to 611 pages there is scarcely an unnecessary paragraph." Had this reviewer been familiar with book-making he would no doubt have detected that the few paragraphs unnecessary to the treatment were necessary to the books of a page broken by illustrations, or of a page at the end of a chapter. The editors received it with such words as these: "Incomparably better than any previous poultry book for the student." "Exactly the sort of book we have all been looking for." "The first book on poultry that I have ever seen that seems to me a satisfactory text." "The best thing yet, being authentic and up to date from a practical as well as from a scientific standpoint," etc., etc. The book is elaborately illustrated, having 570 half-tones and drawings, comprising the most interesting and instructive series of illustrations of poultry ever brought together. Price \$2.50.

Our Domestic Birds

presents the first complete statement of the rudiments of aviculture for boys and girls. It teaches the things that everyone ought to know about poultry, pigeons, and cage birds. Particular attention is given to the varieties of birds and to methods of management best suited to young beginners. It is a book that is read with interest by all young people whether engaged in keeping poultry or simply reading for information. 327 pages; 236 illustrations. Price, \$1.35.

Common-Sense Poultry Doctor

The best treatise on poultry diseases for the ordinary poultry keeper who has to diagnose diseases in his flock for himself, and apply simple remedies. In his early commercial poultry keeping days the author gave a great deal of attention to treating sick poultry, and had marked success with many severe cases. Like most practical men, however, he soon discontinued "doctoring" except for cases where a few simple treatments are effective. Some years later when he became editor of FARM-POULTRY he had to give a good deal of attention to this subject in order to advise subscribers having sick birds. "The Common-Sense Poultry Doctor" treats the subject along the lines which this experience showed him are most helpful to poultry keepers. While most emphasis is placed upon the simple remedies most easily applied, those required for treatment of serious cases are also given. 176 pages. Price 50 cents.

Broilers and Roasters

A hand-book especially for those producing table poultry for the eastern city markets. It treats its special subjects more elaborately than they can be treated in a general work on poultry culture. 96 pages; 20 illustration. Price 25 cents.

Winter Eggs

A monograph on the subject of most interest to the greatest number of poultry keepers. Those who want to concentrate their efforts on winter egg production will find this little book in which all points bearing on the subject are brought together without reference to their other relations, very serviceable. 48 pages. Price 15 cents.

The above books constitute Mr. Robinson's contribution to date to permanent poultry literature. "First Lessons in Poultry Keeping" is not included in the list because it is not a "book" in the true sense, but a collection of articles of varying quality. Only a limited number of copies of the first series are on hand, and it will not be republished.

No Poultry Keeper Can Afford to Be Without the Books by John H. Robinson That Suit His Need.

HAVE YOU GOT YOURS?

We Will Send You Any in the Above List, Postage Prepaid, at the Price Stated.

FARM-POULTRY PUBLISHING CO., 39 Sudbury St., BOSTON, MASS.



Ideal Business S. C. White Leghorns

they are to pass upon, to intelligently award prizes. And it must be understood that no more and no less value can be placed on any section than is provided for in the 'Scale of Points.'

That sounds very well, but here comes the Decimal Score Card with a slightly different arrangement of sections of the fowl and a quite different assignment of "points" to different sections, but with the same scale of points for all breeds.

The Standard makers, taking the attitude that they did about the function of the scale of points, insisted that the association could not recognize a score card with which a different scale of points was used. This position has been maintained for many years in the face of the fact that many judges were using sometimes the A. P. A. score card and sometimes the decimal score card, and scoring the birds the same in either case. A judge who uses only the decimal score card is likely to regularly score a little higher than birds would be scored by the A. P. A. card, because there are fewer sections and therefore fewer opportunities for "cuts." But generally birds score so near the same by the two systems, with the same cuts in the same sections, that it is quite plain to anyone who will take the trouble to study it out for himself that the scale of points is not a real factor.

Buff Orpington Breeders Beware!

I have just received a circular from England in which S. H. Jacks, West Didsbury, England, claims he sold me Buff Orpingtons that won all of my prizes at Pittsburg, in January, 1914. I have a letter from Mr. Jacks in which he claims my winning birds at Madison Square Garden were also his.

The facts of the case are that I have never exhibited a bird sent me by Mr. Jacks. During several years, at periodic intervals, he sent to Owen Farms some very good Buff feathers and quoted comparatively moderate prices on the birds. In the fall of 1913 I decided to import some Buff Orpingtons to start another family of new blood in my yards, and I concluded I would give Mr. Jacks the order on account of the extremely glowing descriptions of birds which he said he could send me.

In due course the birds arrived, miserably cooped, and there was not a decent specimen in the entire lot, excepting one hen four or five years old. She, of course, had gone by her usefulness. The cock and cockerel that were to be real stars had white in neck and white at base of tail; the cock bird was a very small Wyandotte shaped bird, and the cockerel had very little Orpington type. I wrote Mr. Jacks and offered to return the birds for just half the price that I had paid him, telling him that my loss would be considerably less in this way than to market the birds for what they were worth, and that no one specimen was fit to go into my breeding pens. Mr. Jacks either knows nothing about a Buff Orpington or is absolutely unprincipled, and he refused my proposition.



ALL READY FOR A GOOD MEAL

If you want eggs this winter—or if you want your birds to fatten up quickly—

Get a Pail of

Conkey's POULTRY TONIC

and start feeding it now.

Conkey's keeps their organs in strong working condition; they have an appetite for their food and that means EGGS or rapid fattening.

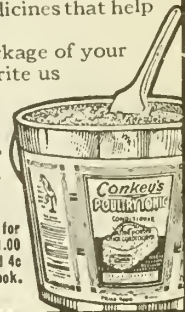
There's nothing in Conkey's Poultry Tonic that can hurt your birds—no cayenne pepper—nor filler—just good medicines that help nature do its work.

Get a Pail or Package of your nearest dealer or write us for prices.

The G. E. Conkey Co.

Conkey Bldg.
CLEVELAND, O.

Use Conkey's Roup Remedy for colds and Roup, 25c, 50c and \$1.00 packages, postpaid. Also send 4c for valuable 80-page Poultry Book.



I never cry over spilt milk and I accepted my medicine, but I consider it only fair to warn my brother breeders in America not to buy of Mr. Jacks, as apparently he is making a campaign through the mails of the American Orpington breeders, soliciting business on my winnings, and I will repeat that not one bird that Mr. Jacks sent me was ever exhibited; nor was one bird placed in my breeding pens.

Mr. Jacks knows perfectly these facts, as I have written them to him in very emphatic language, and his circular is the most fraudulent misstatement of facts that I have ever seen.

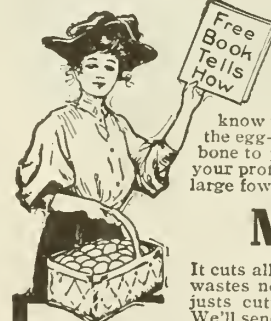
Fraternally yours,
MAURICE F. DELANO.

Vineyard Haven, Mass.
Nov. 12, 1915.

Every one of my Pittsburgh Show string was bred and raised on my own farm.

When writing to Advertisers always mention Farm-Poultry

CAUTION: Any Bone Cutter claiming to be MANN'S without F. W. MANN CO. cast on its surface, is an imitation. The genuine MANN'S is made only in Milford.



Make Hens Lay

READ THE BOOK THAT TELLS HOW

Tells you how to **make hens lay**. Gives you in a nutshell the whole matter of right feeding. Read it if you want to know the **real value** of fresh, raw bone, which contains four times the egg-making ingredients that grain has. You **must** feed raw, green bone to promote **growth, development and laying**. It doubles your profits in number of eggs, fertility, strong chicks, large fowls. It is easily and quickly prepared with

MANN'S Latest Model Bone Cutter

It cuts all green bone with all adhering meat and gristle; wastes nothing and never **clogs**. Automatically adjusts cutting to your strength. Anyone can turn it. We'll send you one on **10 Days' Free Trial**. **No money down**. If not satisfactory, return at our expense. Send for book today.

F. W. MANN CO. Box 55 Milford, Mass.



PULLETS

2000 Barred and White Rock and White Wyandotte Pullets at Attractive Prices.

These pullets are March and April hatched, reared and grown on range, fully matured and developed, and ready to do business, \$1.25 each; \$1.10 each in hundred lots. 1,000 yearling hens at prices that will move them quickly. They are grand in type and shape, and would make splendid breeders; at \$1 each in any quantity. 200 good, big, husky snappy breeding cockerels, March hatched and with quality hard to beat, at \$2 each. Satisfaction guaranteed with every sale. Address,

H. H. AUDLEY, Box 661, CINCINNATI, OHIO.

1500 Hen Hatched, Farm Raised

Barred Plymouth Rocks Single Comb Brown Leghorns

The home of Ivanhoe, (pronounced the best Barred Plymouth Rock cockerel of the season), also of Worcester XIV, the best S. C. Brown Leghorn cockerel ever produced. Our customers stay with us. We can please you in winners, breeders of fine utility stock.

GROVE HILL POULTRY YARDS

Box 666, WALTHAM, MASS.

One Gallon Oil

Heat Underneath

DUPLEX Central Heating Plant squarely underneath — heats ascends — takes up proper amount of moisture from X-Ray Generator, is carried to all parts of hatching chamber uniformly. No cold spots or corners. Put a gallon of oil in X-Ray tank, light lamp and forget. Only 1 filling of tank required for entire hatch.



Biggest Hatches

X-Ray Automatic Trip regulates the heat exactly.

Send for free X-Ray book No. 23. X-Ray Incubators and Brooders shipped to practically all points express prepaid.

The X-Ray Incubator Co.
Dept. 23
Des Moines, Iowa

One Filling

Rid-of-Rats

The Only Non-Poisonous Exterminator of Rats and Mice. Perfectly harmless to man, bird or beast, but quickly and surely destroys the RAT and MOUSE pest.

Price per Box, 10c all over the U. S. Per Doz. Boxes, \$1.00 east of Mississippi Per Doz. Boxes, \$1.20 west of Mississippi

Satisfaction guaranteed or money back. Ask your dealer, or send us his name with price, and we will fill your order promptly.

Catalog of Berg Specialties free on request.
Berg & Beard Mfg. Co., Inc.
61 Fleet Pl., Brooklyn, N.Y.



I. W. BEAN

Originator of the BEAN STRAIN OF R. C. Rhode Island Reds and now breeding also "Tabasco" (Old A res) Strain Single Combs
344 Pond St., South Braintree, Mass.

The Big Boston Show

The Boston Show premium list of over one hundred pages will be in the mail December 1st. The regular and special prizes amount to several thousands of dollars. The usual handsome challenge cups will be up for competition and the beautiful Houdlette trophy comes up for its second competition for best cock, hen, cockerel, and pullet in Silver Wyandottes. The club meets already scheduled for Boston are:

The Waterfowl Club of American, The Massachusetts State Meet of the American Light Brahma Club, The Massachusetts State Meet of the American Houdan Club, The N. E. Golden Wyandotte Club, The Blue Orpington Club, The National American Dominique Club, The Hamburg Fanciers' Club, The N. E. Bantam Club, The N. E. Turkey Club, The State Meet of the International Partridge Rock Club, The American Pigeon Club, The American Jacobin Club, The American Pigmy Pouter Association, The American Tumbler Club, The Oriental Frill Club, The Exhibition Homer Club, The Massachusetts Fur Fanciers' Association.

Tempting prizes are also offered in the utility division. The prizes on dressed poultry are \$20, \$15, and \$10 for six birds, and for eggs \$10, \$8, and \$5.

Never has there been such a demand for premium lists from all over the country, and the big show promises to beat its own great record. Exhibitors are requested to forward entries as early as possible so that the office will not be swamped on the closing day.

W. B. ATHERTON, Sec'y.

Madison Square Garden

Proposed List of Judges of Poultry at the 27th Annual Show, Dec. 31, 1915 — January 5, 1916

Louis Paul Graham—Barred Plymouth Rocks. George W. Tracey—S. C. R. I. Reds and Buckeyes. Wallace R. Pierson—R. C. R. I. Reds. George W. Dakin—White Wyandottes. F. L. Platt—Light Brahmas, Sussex and Dorkings. Irving F. Rice—White Leghorns. J. H. Minshall—Minorcas. Dr. A. T. Beckett and W. E. Samson—Silver Laced Wyandottes. M. L. Chapman—Campines. J. C. Kriner—Waterfowl and Turkeys. Len Rawnsley—Buff and Black Orpingtons. Richard Oke—White, Blue, Jubilee and A. O. V. Orpingtons. W. G. Minich—Hamburgs, Polish, and Andalusians. J. G. Punderford—Buff Plymouth Rocks, Buff Wyandottes, and Black Leghorns. H. B. Hark—Partridge Plymouth Rocks,

Partridge Cochins and Black Wyandottes. H. P. Schwab—Columbian Plymouth Rocks, Buff Leghorns and Langshans. J. H. Drevenstedt—Cornish, Dominiques, Brown Leghorns and Silver Penciled Wyandottes. J. F. Van Alstyne—Columbian and Golden Wyandottes. W. B. Atherton—Houdans and Faverolles. James Glasgow—Exhibition and Pit Game, Game and Malay Bantams, Sumatras and Malays. George L. Young—Clean Leg Bantams. W. H. Congdon—Feather Leg Bantams. W. M. Anderson—Anconas, Buttercups, Lakenvelders and Spanish. T. F. Rigg—Cochins (except Partridge Cochins), Greve Coenrs, La Fleche, Red Caps, Sultans, and Frizzles. F. W. Rogers—Silver Penciled Plymouth Rocks, Dark Brahmas, Partridge Wyandottes, and Silkies. Geo. H. Burgott—Silver and A. O. V. Leghorns and Javas.

Poultry Show Dates

(Continued from Page 251)

Dec. 7-11. Norwalk, Ohio. Chas. O. Jackson, S'y.
Dec. 13-17. Mt. Carmel, Ill. L. S. Hochran, Sec'y.
Dec. 13-18. Indianapolis, Ind. G. G. Ott, Sec'y.
Dec. 20-25. Plainville, Ind. O. M. Heldt, Sec'y.
Dec. 27-Jan. 1. Caldwell, Kans. L. A. Perry, S'y.
Jan. 3-7. Madison, Wis. J. G. Halpin, Sec'y.
Jan. 3-8. Cleveland, O. Dr. A. H. Lindhorst, S'y.
Jan. 10-14. Indianapolis, Ind. C. H. Millhous, S'y.
Jan. 10-15. Kansas City, Mo. E. L. Noyes, Sec'y.
Jan. 13-19. Chicago, Ill. D. E. Hale, Sec'y.
Jan. 17-22. Decatur, Ill. H. B. Lowe, Sec'y.
Jan. 17-22. Denver, Colo. W. S. Schuman, Mgr.
Jan. 24-29. Eaton, Ohio. Ora Overholser, Sec'y.
Jan. 24-30. Elkhart, Ind. W. E. Bruning, Sec'y.

To Our Sympathetic Friends

Handicapped as we both have been and obliged to conserve our strength as much as possible to assist recovery, it has not yet been possible for the editor and his son to reply by mail to the many letters of sympathy that have been received from readers of this paper since the issue reporting our injuries was mailed.

We hope soon to make acknowledgment of each. Meantime we thank our friends collectively, and take pleasure in reporting that the damaged members are mending as rapidly as could be expected from the nature of the injuries.

"Chickens is Chickens."

Conditions are such that, to paraphrase a familiar saying, poultrymen will find, later on, from the viewpoint of profit, that "Chickens is Chickens." This season you want your incubator to hatch strong, lusty little fellows, your brooder to properly protect them during the critical stage, so that, eventually, they will grow into vigorous and healthy birds, the only kind that spell profit. This desirable program is seriously jeopardized, however, by the use of an inferior oil in the incubator and brooder lamp. There is no gainsaying the fact that a cheap product is a constant menace to success by the generating of fumes that mean droopy, devitalized birds — birds that at the very beginning are badly handicapped and rarely reach the maximum of their profit producing capabilities. Commonwealth Safety Oil, the kind that poultrymen now recognize as the only oil that will not even char the wick during the twenty-one days of the hatch, is your greatest safeguard in artificial incubating and brooding operations. No need, then, to worry about crusted wicks, consequent fumes, and bothersome trimming. Commonwealth Safety Oil, manufactured by Jenney Mfg. Co., 8 India St., Boston, Mass., eliminates these, as leading poultrymen and poultry supply houses everywhere will assure you. It has no equal as an oil for house lighting purposes, a fact which has been recognized for years. The cheaper oils have their field, which is to destroy lice and mites on roosts and all interior woodwork of hen houses by the spraying or painting process. The Jenney people can also supply you with a brand of that kind which is of proven effectiveness, at a nominal price per gallon.

Winning Made Easy

Are you bring out all the quality that your birds have? It is not only necessary for birds to be clean but they must be fitted and trimmed to the minute to win. By sending to me to wash and fit, the very last finishing touches will be put on. Twenty years experience in showing is yours with every bird sent me. Am open to a few more judging engagements. Arthur G. Dutton, Framingham, Mass.

The breeder who has made possible the World's best flock of White Wyandottes.

Classified Advertisements

Rate: 15 cents a line. No ad. less than two lines

The best way for the small advertiser to keep always before the public is to advertise regularly in this department

Yearly Cash in Advance Orders

Two lines, one year, 12 times, \$3.00
Three " " " " " 4.50
Four " " " " " 6.00
Etc., etc. For each additional line \$1.50 per year

START YOUR AD. NOW

It does not pay to hold back the small ad. until trade begins. Many readers are considering now where they will buy a few months later.

PLYMOUTH ROCKS.

BUFF ROCKS only; a few nice cockerels reasonable. Noyes, L. Box 273, New London, Ct.

PEDIGREED Barred Rock cockerels \$3 to \$10. Fairfields Farms, Short Falls, N. H. 12

PILGRIM Barred Rocks "have the lay bred in." Cockerels from 200-250 egg hens. Pilgrim Poultry Pens, Orr's Island, Maine. 12

RHODE ISLAND REDS.

STOWE FARM S. C. Reds have large size, rich even color, great laying qualities and are not over frequent sitters. Show birds a specialty. F. D. E. Stowe, Brattleboro, Vermont. 12

PIPER'S Rhode Island Reds — 240 egg strain; both combs; known the world over 19 years. Stock for sale, \$1.50 up. Fall and winter eggs for hatching. Bay View Farm, North Haven, Me. 12

ROSE COMB REDS—great laying strain; fine cockerels, cocks, pullets, hens, \$1 each up. Circular free. Albert Dally, Frankfort, Ohio. 12

S. C. RED COCKERELS, \$2.50 and \$3 each. Barnard D. Shaw, Wilmington, Vt. 1

RED REDS—Cockerels from a R. C. "I. W. Bean" male mated to our best females. Prices right; birds right. Satisfaction guaranteed; 4 firsts Cambridge, 1915. B. M. Gould, West Rupert, Vt. 12

WYANDOTTES.

BOSTON WINNING Buff Wyandottes. Can I help you to winners or breeders? Sewell Cir. Dr. N. W. Sanborn, 324 South Road, Holden, Mass.

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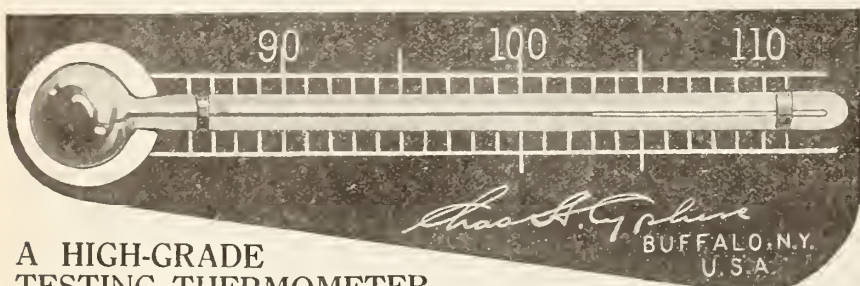
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WITH A COPY OF MY NEW BOOK

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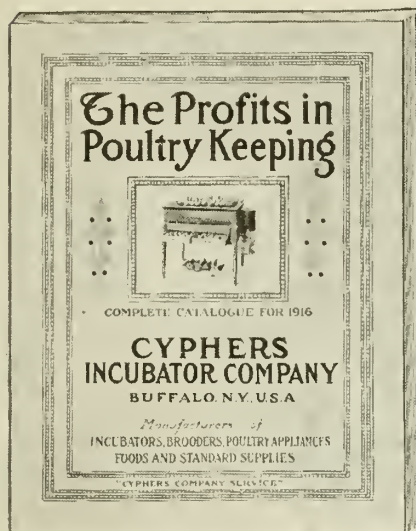
BUFFALO INCUBATOR CO.

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Cyphers Company's Great 1916 Year Book Now Ready

An annual event for which poultrymen regularly wait before completing their plans for the new year's work with poultry is the arrival of Cyphers Incubator Company's Annual Year Book or Catalogue. We are glad to be able to announce now that the Year Book for 1916 is ready for mailing. The title of this big illustrated volume of 172 pages, 7½ x 10 inches in size, is "The Profits in Poultry Keeping."

This Year Book describes a complete high grade line of incubators, brooders, laboratory products, poultry foods and



supplies, and all will be pleased to note the very favorable prices quoted. This year there are some particularly interesting announcements that every poultry raiser will want to read.

The Cyphers Company has always stood four square on the subject of high quality of material and workmanship, and it demands the highest possible practical value in all that it offers for sale. The Standard Cyphers Incubator holds an enviable place in the esteem of poultrymen the world over, and we are pleased to learn that the two new low priced incubator models—the Columbia hot air and the Superior hot water—introduced last year, have met with an enthusiastic welcome.

The annual open letter from President Grant M. Curtis, always inspiring, helpful, and pace-making in its tone, is relied upon by thousands of poultrymen as a careful and conservative, but always optimistic analysis of the year's prospects in the poultry world.

The Cyphers Company's Service Department, fully described in the Year Book, is maintained solely to give practical advice and assistance to poultry raisers—not only Cyphers customers, but everyone who needs help in making a success with poultry. There is a "Personal Letter Service," capably manned, which answers inquiries directly by letter, and there is no question about the fact that it has proved of incalculable benefit to thousands who have had special problems or difficulties to meet.

When writing for this book please mention FARM-POULTRY. Address Cyphers Incubator Co., Dept. 12-W, Boston, Mass.; Buffalo, N. Y.; New York City, N. Y.; Chicago, Ill.; Kansas City, Mo.; Dallas, Tex.; or Oakland, Cal.

Publishers' Statement.

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Trustees under the will of Frederic G. Boynton.

(SIGNED) ISABEL B. ROBINSON, President Farm-Poultry Publishing Co.
Sworn to and subscribed before me this 18th day of October, 1915.

[SEAL]

WM. N. WILLIS, Notary Public,
Reading, Mass.

(My commission expires July 17, 1919)

Pratt Experiment Station Birds Make Big Winnings

The fall fair season is over and the winter poultry shows are starting. It may be a bit early to indulge in forecasts, but if the size and quality of the poultry exhibitions held this fall, the attendance and enthusiasm of the public, may be considered a good indication, next season is bound to be a sure enough big year in the poultry industry.

The Pratt Food Company of Philadelphia has continued to follow its usual custom, and has entered nice strings of birds at the early shows. These specimens were all bred and reared at the Pratt Poultry Experiment Station, Morton, Pa., at which institution much research work is being conducted in the interest of this concern and its thousands of customers.

At Allentown, Hagerstown, and West Chester, the Pratt birds won many ribbons, and at the Pottsville Poultry Show, November 9—13, they were awarded 24 first, 20 second, and 6 third prizes, besides 12 specials.

Two utility pens—fowls of the desired laying type—were also entered. A White Wyandotte pen won first and a White Leghorn pen second. Curiously enough the winning Wyandotte pen laid the most eggs during the show, closely followed by the Leghorns. Both pens distanced their nearest competitors and thereby won two more special prizes.

The great success achieved by the Pratt Poultry Experiment Station in producing both bred-to-show and bred-to-lay stock is little short of remarkable. The experts connected with this station are glad to help poultrymen solve their vexing problems, and make no charge for assistance rendered. Any earnest poultry keeper who desires personal assistance and advice may secure same free by addressing Service Department, Pratt Food Co., Philadelphia, Pa.

Test Your Thermometers

We call the attention of readers to the special offer of a high grade testing thermometer with a copy of Chas. A. Cyphers new book, "An Analysis of Successful Hatching Practice," made in the advertisement of the Buffalo Incubator Co., on page 254. Correct thermometers are absolutely necessary in artificial incubating and brooding. Any inaccurate thermometer leads the operator astray. Mr. Cyphers' discussions of matters relating to artificial hatching are always well worth reading and careful study. The writer became acquainted with Mr. Cyphers when he was just beginning to build incubators, and has been indebted to him for much valuable information relative to this line of work. Hence we feel sure that his newest book will be greatly appreciated by students of poultry problems.

Trafford Has a Great Imagination

Henry Trafford, editor of *Poultry Success*, has just discovered the word "new" in the headlines of *Scratchings*, and comments upon it as follows: "This probably means that Mr. Robinson has very recently fallen into the practice of changing the litter. This, to our way of thinking, is a wise plan. Wonder why he has not done this before. We can now easily understand how he got disgusted and out of sorts in wading through the old litter."



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CYCLE HATCHER COMPANY
ELMIRA, N. Y.

Mr. Robinson recently took charge of a poultry farm and probably discovered very soon that a change of litter was a necessity once in a while."

'Tis too bad to spoil such a brilliant effort of the imagination and the unreasoning powers, but the simple fact is that the "new" was inserted last January, six months before the beginning of my connection with T-O-P Farm. And the simple and only reason for using it was that when we changed to single column headlines the old heading did not make up well and the additional word was put in because it was the only one I could think of at the moment that was appropriate and the desired length.

There has been no change whatever in the practice of dealing with the litter of our exchange table. To be perfectly truthful, the "table" does not exist. The exchanges I look over as they come in and dispose of according to what I find of interest in them, either on my desk or in a rack. Most of them I never look at again, but, as a rule, I keep all papers for several months in case there should be occasion to refer to them. What disgusts me in wading through them is the sort of stuff of which Mr. Trafford's comment is a sample.

Why don't you get up a FARM-POULTRY club of five in your neighborhood?

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A Popular Subscription Campaign

Although the above announcement of price and terms was first made only a month ago, the returns already show that poultry keepers approve the policy of one price to all, that many subscribers prefer to take out five year subscriptions, and that many are disposed to do missionary work among their friends and neighbors by getting a club of five or more subscribers. For the assistance of those forming such clubs we give here

A Few Facts About Farm-Poultry

FARM-POULTRY is published for three classes of readers:

- (a) For all people interested in poultry in New England and adjacent territory.
- (b) For those everywhere who want to be kept posted on developments in poultry culture in this area, which is the most advanced poultry section in the world.
- (c) For students of poultry matters who want competent criticism of all matters of general interest in poultry culture.

FARM-POULTRY is pre-eminently the organ of stable and permanent poultry interests. It is one of the oldest poultry papers in the United States, and has a longer record of uninterrupted prestige and influence than any other poultry paper. One of its long time advertisers said of it recently: "Farm-Poultry is an institution."

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We welcome support from everywhere, but we want most of all the united support of poultry interests in our home territory. We need this, and poultry interests here need to co-operate to secure from their home paper the best that it can do for them.

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CLEAR CASE OF UTILITY-PHOBIA

IN AN interesting article on "That Word 'Utility,'" in the *American Poultry World* for November, W. C. Denny tells us that, "Properly speaking, the word utility, as applied to poultry at the present time, refers to that class of poultry that is discarded as culls by the fancier." He says: "The word, as first applied to poultry, was used by breeders of standard fowl who wished to dispose of their culls. * * * The term is an advertising term pure and simple, and has been ridden hard and fast by poultrymen because it appealed and helped them to dispose of birds that they could not and should not use for breeding purposes."

I think that Mr. Denny would find it rather difficult to establish it as a fact that the word utility, as applied to poultry, first came into use in the way he states. Believe me, it would be some job to prove that. Also, exception may reasonably be taken to the opinion that the proper meaning of the term, as applied to poultry, is the meaning in which it is misused for advertising purposes. The fact that it was so misused suggests that the term was in use before the fanciers began to trade on it. Not that all, or nearly all, breeders who sold culls as utility stock have misrepresented their stock or misused the term. Many breeders of exhibition poultry are just as careful that the stock they sell as utility stock shall be satisfactory for the purpose of the buyer as that the stock they sell for exhibition and breeding shall fill the specifications. A breeder who will over-reach his customer on utility stock will probably do the same thing when selling fancy stock.

Neither the proper nor the technical meaning of a term like this is determined by the way a limited class use it. The general common understanding of utility poultry is that it is poultry kept for and especially adapted to the production of eggs and meat. The fact that some fanciers put culls of no particular value for any purpose in the same class with their culls for fancy that were suitable for utility purposes, and worked them all off as utility stock does not make them utility stock. The breeders of standard stock who did this did not thus determine the "proper" use of the word utility, but they did seriously damage the reputation of standard fowls as utility fowls.

As I read through Mr. Denny's article, it seems to me that the word utility has the same effect upon him that the word fancy has upon some good men and good poultrymen of my acquaintance who "see red" the moment anyone says fancy. Says he: "The egg laying contests have rendered a valuable service to the poultry industry, and we believe that the time is approaching when only standard breeds and varieties will be admitted, that each pen will be required to score a certain number of points as provided in the American Standard of Perfection. When this time comes it will sound the death knell of so-called utility flocks." And farther on: "There should be no so-called utility poultry without standard poultry."

The only way that I can imagine of bringing about what Mr. Denny desires is to make all standard stock unquestionably good utility stock. Whether it will then be possible to get rid of the word utility seems to me doubtful.

Mr. Denny carries his antagonism to the utility idea so far that he would like to prohibit the shows offering prizes for utility classes. He foresees dire calamity to the poultry industry if this is allowed to go on. Says he: "There are many evils that contribute to keep this utility

bugaboo in the limelight, and one of the most vicious of these is the practice of several show managements in making separate classes and soliciting the entry of this so-called utility poultry. The practice not only lends encouragement to this misnomer branch of poultry raising, but by fostering it will eventually result in a breach in our poultry industry, whose present and prosperous state can be attributed to the standard bred interests and nothing else." An exception seems to be made in favor of the utility classes at Boston, which, it is admitted, are tending to emphasize the fact that standard types (some of them) are good utility types, help to correct misapprehensions.

Personally, I am not able to get into the state of mind in which I could fully sympathize with Mr. Denny's attitude, and endorse his views as to the relation of standard bred interests to the industry. I know of no good reason why the managers of shows should not provide classes for and encourage entries of fowls of any kind, class, or grade that is of real interest to any class of poultry keepers. What seems to me desirable is not that the devotees of the "standards" should exterminate those whose interest take a different form, but that all should get together. It is the extremists in various directions that prevent this.

RELATION OF PRICE TO QUALITY

THE *Chicago Dairy Produce* notes editorially that certain Michigan store keepers have announced an intention to buy eggs from farmers "on grade," or at different prices according to quality. The distinction made, according to this announcement, is that "strictly fresh" eggs of good size are to be taken under present conditions of marketing at 25c., the next grade at 22c., and merchantable stale stock at 20c. This, in our opinion, is an illustration of the entire inadequacy of "quality buying," as generally practiced in the interior, to produce the desired results. Of course the prices paid to producers for different qualities must depend upon the method of classification, and the closer the grading the more is the real difference in value. But if eggs are candled in the country on the same basis as they are candled for retail distribution here, the difference in prices fairly payable at primary points would be very much greater — so great, in fact, as to demonstrate to producers the profit in prompt marketing and the loss in holding fresh eggs under the more or less unfavorable environment generally met with on the farms. At this writing uniformly new laid western eggs of good size, clean and well packed are worth at least 40c. a dozen on this market, and Michigan store keepers could afford to pay far more than 25c. for such eggs if they are selected with a correct understanding of the necessary quality requirements; probably they could pay as much as 33c., or perhaps 34c. For badly shrunken, weak bodied eggs they should not pay over perhaps 18c. to get any profit on sales at current values of this class of stock here, and they might pay an intermediate price for more or less shrunken stock of good body. If those who buy eggs from farmers at this season would make such a difference in their paying prices as this — a difference actually justified by selling values in the eastern markets — it is quite certain that farmers would "sit up and take notice." Why should anyone start a "quality payment" system by making a difference of 5c. a dozen in the different grades when there is an actual difference of, say, 17c. in final selling value?—*New York Produce Review*.

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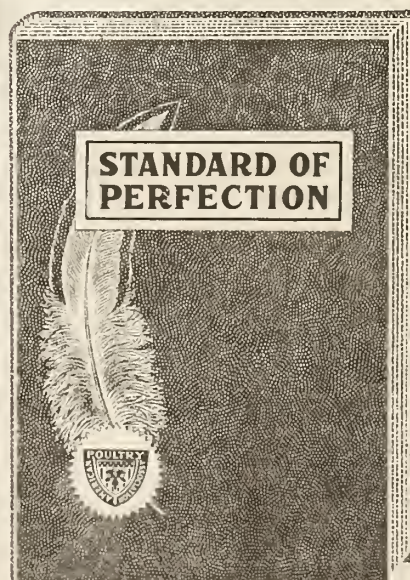
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